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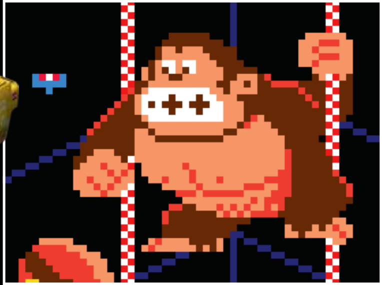

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mo Minamoto

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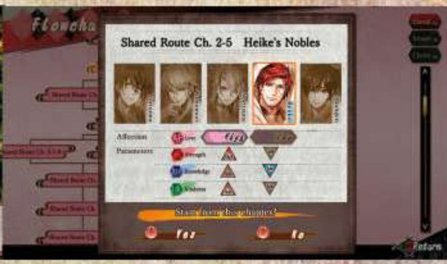

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THE RETROBATES

WHAT'S YOUR FAVOURITE WIPEOUT GAME?

DARRAN JONES

I'm going for the *WipEout Omega Collection* because the VR update for it is sensational.
Expertise: Jugging a gorgeous wife, two beautiful girls and an award-winning magazine, all under one roof!
Currently playing: *Silent Hill: Shattered Memories*
Favourite game of all time: *Strider*

TIM EMPEY

2097 was the one I played the most. Great soundtrack and I unlocked the Piranha ship without using cheats.
Expertise: Finishing Game Pass games before they leave the service
Currently playing: *Elden Ring*
Favourite game of all time: *God Hand*

NICK THORPE

WipEout 3: Special Edition has all the stuff from the original version, plus eight tracks from the first two games and various tweaks. It's one of the PlayStation's best PAL exclusives so don't miss it.
Expertise: Owning five Master Systems and a Mark III
Currently playing: *Final Fantasy VII Remake*
Favourite game of all time: *Sonic The Hedgehog*

ANDY SALTER

Don't think I've played a *WipEout* game, maybe a demo. Sure it was a racing game that involved combat but I never really got excited by it.
Expertise: Modding games, no 'vanilla' versions for me, thanks!
Currently playing: *M&B2: Bannerlord…* Modded of course
Favourite game of all time: *Rome: Total War*

PAUL DRURY

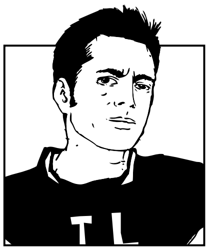
It has to be the first one. And I really did play it first in a night club, which I know is like claiming to have seen the Sex Pistols at Manchester's Lesser Free Trade Hall…
Expertise: Todd Carty's acting career
Currently playing: *Chernobylite*
Favourite game of all time: *Sheep In Space*

PAUL ROSE

Favourite *WipEout*… the first one. For the soundtrack alone. I always found it too fiddly!
Expertise: Winging it
Currently playing: *A Short Hike*
Favourite game of all time: *Half-Life 2*

ANDREW FISHER

WipEout on Saturn. I have only played the early titles, and I love the Tim Wright (Cold Storage) music on this one.
Expertise: Forty years of gaming, from Commodore 64 to Switch
Currently playing: *Super Seymour Saves The Planet*
Favourite game of all time: *Wizball*



IAIN LEE

The VR version for me. I can't play it for more than one race at a time as it makes me car sick but it's incredible.
Expertise: Buying expensive stuff on eBay then never touching it
Currently playing: *Cyberpunk 2077*
Favourite game of all time: *Elite* (BBC Model B)

RORY MILNE

I'll always love the original. I remember hearing it before seeing it, asking what album was playing and being told: "It's not an album. It's *WipEout*." And just like that, gaming was cool.
Expertise: The game that I'm writing about at the time of writing
Currently playing: *Doom*
Favourite game of all time: *Tempest*

LOADING...

It has taken me 48 years to realise I've never been cool and I've never been hip. I never frequented nightclubs much as a youngster and you'd have to pay me to embrace dance music – clubbing just never appealed to me.

Unlike myself, the original *WipEout* is cool and impossibly hip with it and its dance-enhanced soundtrack saw clever marketing bods showcasing it to eager 20-somethings in UK nightclubs during the Nineties. It wasn't just coolness or clever marketing that allowed Psygnosis' game to soar as effortlessly as its anti-grav vehicles did on *WipEout*'s crazily constructed tracks, though, it was a bloody good game and it was succeeded by some bloody good sequels as well.

In addition to revisiting the original *WipEout* and its many sequels, we also converse with the developers who helped turn the slick futuristic racer into a smash-hit franchise for Sony. It's a great article that highlights exactly why *WipEout* will always be cooler than I am.

You'll find plenty more delights inside this month's issue, including the arcade classics *Major Havoc*, *Bubble Symphony*, *Donkey Kong 3* and um… *Krull*, as well as a look at *Professional Ski Simulator*, *Red Faction* and *Super Cars II*. We've also got a fantastic subs offer on page 30, so take a look if you're in need of a new joypad.

Stay safe and enjoy the magazine,
Darran

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wipEout
THE EVOLUTION OF
RED FACTION
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Nick was feeling like playing a fun videogame licence, so he revisited all the cool bits from Konami's NES game

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M Bison is a git. Nick knows this because he's just been fighting him in Capcom's excellent PlayStation conversion

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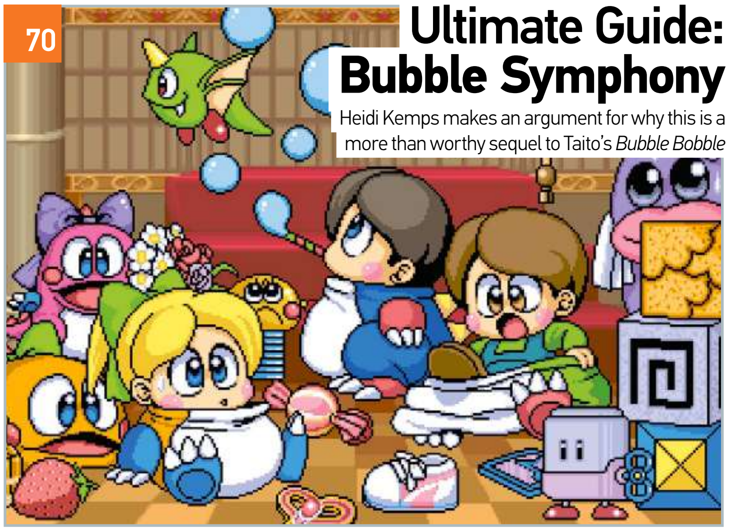

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RETURN OF THE DEAD

We speak to the team that revived The House Of The Dead

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Everyone has a game they feel is perfect and Paul has chosen an absolute belter

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Neil Thomas (better known as RCM Retro) shares his many retro-related projects with us

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Nick's in August 2005 and is upset to discover that he can't enjoy the month's highest-rated game

The last five years have been an interesting time for Sega fans, as the company has been actively breathing new life into some of its dormant series. While some of these are internal projects, like the *Sakura Wars* revival or *Virtua Fighter 5: Ultimate Showdown*, plenty of others have been handled by external studios, such as the *Panzer Dragoon* remake by Forever Entertainment. Really getting into the spirit of raising the dead, the publisher and its development subsidiary MegaPixel Studio have turned their attention to *The House Of The Dead*. The lightgun series last shambled onto consoles in 2012, and the original 1996 game has been effectively dead and buried since its Saturn and PC ports in the late-Nineties. That arcade classic has now been exhumed, rebuilt from the ground up for the Switch as *The House Of The Dead: Remake*.

According to co-producer Benjamin Anseaume, the project has been in the works for quite a while. "We started speaking about *The House of The Dead* soon after the beginning of *Panzer Dragoon*'s development," he explains. "The more we were working on the project, the more we were convinced that legacy IPs brought to modern players was a niche we were interested in, both in terms of development and the specific audience. As the co-operation with Sega was going very well, we managed to convince them to trust us with this project." Just as with *Panzer Dragoon*, the team focused on remaking the game from scratch. "Our goal was always to make a modern and HD version of the game, close in terms of fun and gameplay but impressive in terms of graphic quality," says Benjamin. "I think we managed to push the Switch further than we expected!"

> "The biggest challenge was to provide modern visuals that will suit Nintendo Switch hardware"
> **ARTUR GRZEGORCZYN**

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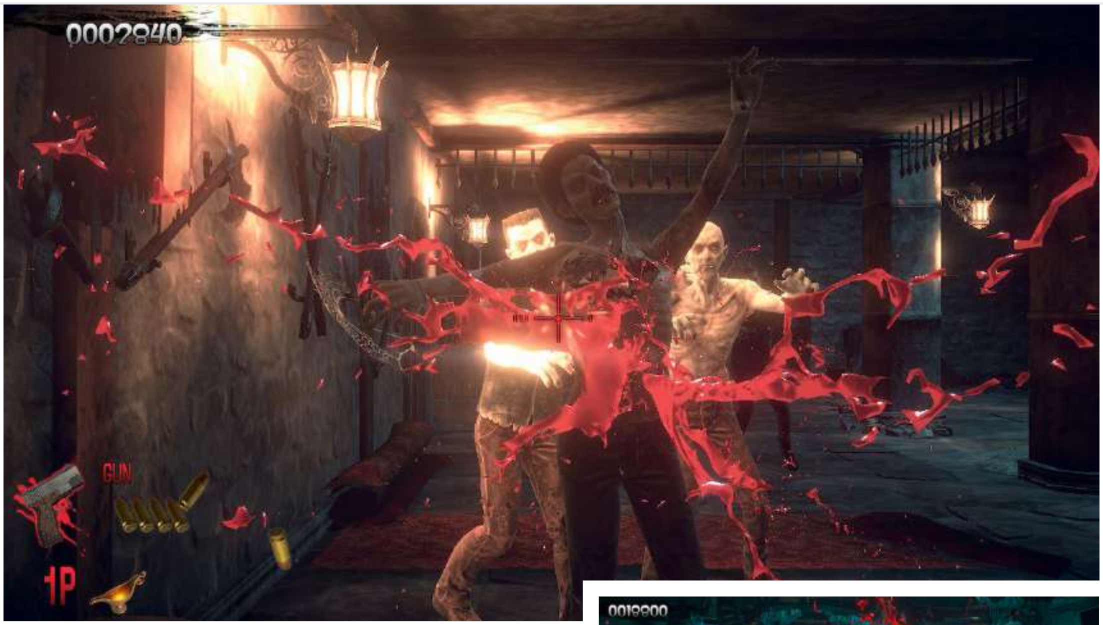
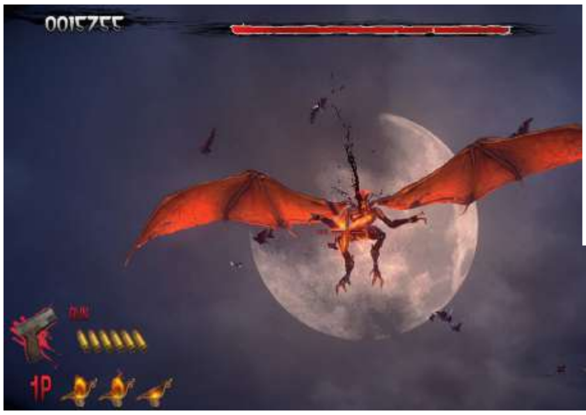
1P

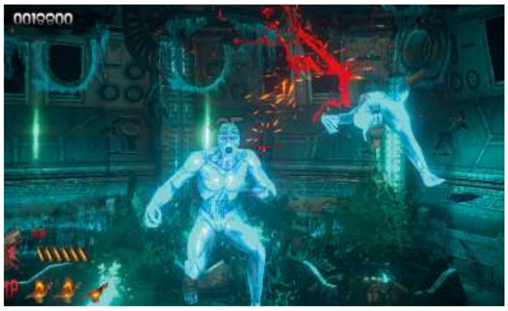
» [Switch] "Trust me, chainsaw dentistry is the way forward," said Samson. "Just look at my lovely teeth!"



» [Switch] The splatter factor is high here as the action gets very bloody, very quickly.



» [Switch] Bosses like the Hangedman are just as tricky as ever, even with pad controls.



» [Switch] You encounter a bright spot in the darkness, but don't mistake it for hope.

What sort of challenges are to be found in such a project? "Because it's an actual remake, not a remaster, the biggest challenge was to provide modern visuals that will suit Nintendo Switch hardware," says project director Artur Grzegorczyn. "In addition, the framerate for a game like this must be high to provide fun and fluent gameplay. Other things were additions to the original, as we wanted to achieve better repeatability of a game. For both challenges we did the same – improve, test, improve, and so on until we have reached satisfying results." What kind of additions are these? "Every time you start a game there are numerous ways to customise it – difficulty (including arcade), scoring system (classic, modern), and the game mode itself – including the original and a horde mode. With that amount of options, both casual and hardcore players should be satisfied."

The choice of the Nintendo Switch as a platform has a lot to do with the lack of lightguns on modern consoles. "Thanks to the Switch, we can use gyro controls to mimic the feeling of the original game. It isn't of course the same in terms of technology, but the feeling is surprisingly close," says Benjamin. "By the way, it was one of the reasons we thought about *The House of The Dead* as a remake, the possibilities are huge and we had this motion design in our heads from the very beginning of the project." Artur agrees that the key advantage of the console was its controllers. "We focused on gyro controls, as Joy-Cons are really great devices for aiming simulation. Thanks to the fact that we have two of them on a single console, multiplayer mode on a single device was an obvious thing to do.

Being a project that is licensed out, it's reasonable to wonder how much involvement Sega had with the project. "We work in close co-operation with Sega. While the game itself is completely developed by MegaPixel Studio, all major decisions, changes and final quality checks are always made together. Especially with *The House of the Dead*, which is quite an important IP for Sega. The dedicated team at their headquarters is always there for us," says Artur. Despite that close relationship, the *Panzer Dragoon* remake launched in a somewhat rough state before being improved considerably via patches, so we were interested to know what the team learned from that project. "A lot! From the development process itself to technical aspects," Artur replies. "Most importantly, we have learned how people judge such remakes and what players really expect. We applied all of these lessons to *The House Of The Dead: Remake*."

It's certainly an interesting project to have undertaken, especially at a time when the lightgun genre at home seems about as healthy as the inhabitants of the Curien Mansion. Why does Benjamin see enduring appeal in lightgun games? "As a 40-year-old player, I totally understand that, it was the good old days with arcade rooms or playing with friends on the couch. I think people want to feel that again and I'm confident that with *The House of The Dead* we managed to bring back this fun directly on the most popular console." *The House Of The Dead: Remake* is out now, and you can turn to page 96 to read our review. *

EVERCADE INDIE LOVE

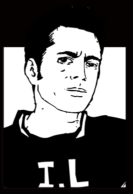
Blaze has announced a new Game Of The Month scheme for Evercade VS owners. For the remainder of 2022, new retro-inspired indie games will be delivered for free via the console's Wi-Fi connection, with the available games switched each month. These are available for a limited time only and you won't get to keep your saves, and you can't play them on the Evercade handheld. However, all ten games will be compiled on the *Indie Heroes Collection 2* cartridge later in the year, allowing permanent ownership for both handheld and VS owners. April's game, if you missed it, was *Tapeworm Disco Puzzle*.

SCREENS OF RAGE

Movie website Deadline recently broke the news of a new Sega movie project, this time based on the *Streets Of Rage* series. Derek Kolstad, the creator of the *John Wick* franchise and writer of *Nobody*, reportedly wrote a script for the adaptation on spec. The project is also said to involve dj2 Entertainment, which produced both *Sonic The Hedgehog* movies, as well as Escape Artists which worked on *The Equalizer* franchise. The movie has yet to be officially announced, and no actors are currently known to have been cast for the film. We'll keep an eye on this project. Who would you want to play Axel and Blaze in it?

Who is Iain Lee?
Iain Lee is a freelance broadcaster who loves gaming, particularly retro gaming. Join him as he hosts a phone-in show and plays games at www.twitch.tv/iainlee and also check out www.patreon.com/iainandKatherine

Lunchtime



As I'm writing this, I'm looking out the window and it is a beautiful day. The sun is shining, it's great T-Shirt temperature and everyone looks happy. It's absolutely stunning.

Meanwhile I'm indoors bashing this out. Before I started writing something that will hopefully tickle your pickle, I spent two hours typing up a 4,500-word case study for the counselling course I'm somehow close to finishing. A wonderful spring day and I'm sat at a computer indoors.

This is not new. I'm taken back to middle school (I only recently found out that hardly anyone knows what a middle school is. It's in between primary and proper big school. For the sake of this story, I'm ten). There was a computer club every lunchtime. You used to be able to rock up and play on the BBC Micro (or the Acorn Electron if you were late) all lunchtime. You didn't have to eat. You didn't have to go outside. You didn't have to do boring computer programming stuff either. I seem to remember for a long time we just played *Dare Devil Dennis*.

Sidenote – playing the BBC version of *DDD* on the Acorn was insane. It ran about four times the normal speed and was all but impossible. It really was amazing to watch one of my peers manage to smash through it, quite possibly the first-ever speedrunner. Sidenote over.

The problem was the computer club got too popular. When I say too popular, there can't have been more than ten of us. But ten kids crowded in the computer room, all vying for some gaming fun, well that got very noisy. Noise brought the attention of Mr Kimber, the terrifying but actually really nice teacher who oversaw the computers. Instead of saying 'yes', he would always say 'correct', and for some reason, this scared me. Why would anyone speak like that unless… they were a robot… I need to take this to therapy.

To make the computer room fairer (and a lot duller) a rota was set up. At the start of the week, a sheet of paper would go up on the door of the computer room. There would be a huge rush at breaktime to get there and get your name on that bit of paper. Lunch was split into two halves, and you could only do one half a day. There would be mayhem and screams of injustice as the faster kids got to put their name down for every day.

This didn't really change anything. We'd sneak into watch and not so silently wait our turn. Thing is, you had to be nice to the team that had the first half of lunch. If they'd loaded up something that took a while, *Cylon Attack* for example, and you'd said something to upset them, it wasn't uncommon for them to switch the computer off as they left. You'd then have to waste a significant amount of time loading it up again.

I loved those lunch breaks. The sporty kids would be out playing football, while the computer lads (and it was always boys) would be playing *Chuckie Egg*. I have absolutely no regrets. The geeks shall inherit the earth. *

> "To make the computer room fairer (and a lot duller) a rota was set up"

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Who is Paul Rose?
Paul is probably better known as Mr Biffo – the creator of legendary teletext games magazine *Digitiser*. These days, he mostly writes his videogame ramblings over at Digitiser2000.com. If you want more Biffo in your eyes, you can catch him as the host of *Digitizer The Show* at www.bit.ly/biffo2000.

Pure and simple

According to researchers at Germany's Max Planck Institute – whatever that is – The Beatles' *Ob-La-Di, Ob-La-Da* is the perfect pop song. It's apparently something to do with the placement of the chords, and the levels of joy they bring to the ears of the listener.

If those researchers applied similar principles to *Space Invaders*, I'm certain they'd draw the same conclusion as me. To wit: I think *Space Invaders* is literally perfect, and arguably has never been bettered. I've surely argued before in this column that Taito's 1978 arcade classic is the single greatest videogame of all time. Not because it was first in so very many ways, but because of its purity. It's utterly peerless.

However, there's another game that, for me, comes close. In 1981, or thereabouts, I received for Christmas the perfect home interpretation of *Space Invaders* – *Astro Wars*.

Alright, alright. Calm down a bit. Those of you who know that *Astro Wars* was essentially a version of *Galaxian*, and was indeed licensed in the United Kingdom by electronic gaming legends Grandstand, from Epoch who sold the thing in Japan as *Super Galaxian*.

Yes, I know.

My point still stands: *Galaxian* was a derivative of the *Space Invaders* formula. Prettier, more colourful, more complex, but essentially the same basic idea. To have that in my own bedroom, in the form of a machine that felt like a full-colour, scaled-down arcade machine was mind-blowing. I was the envy of all my imaginary friends.

As with *Space Invaders*, even outside of the perfect gameplay itself, the iconic design of the *Astro Wars* hardware was a huge part of the appeal; the oversized fire button, the angled body, and the screen itself. Part of what I'd always loved about the original *Space Invaders* was the Pepper's Ghost effect used on the screen. *Astro Wars* wasn't the same, but it had a similar sort of prismatic blur.

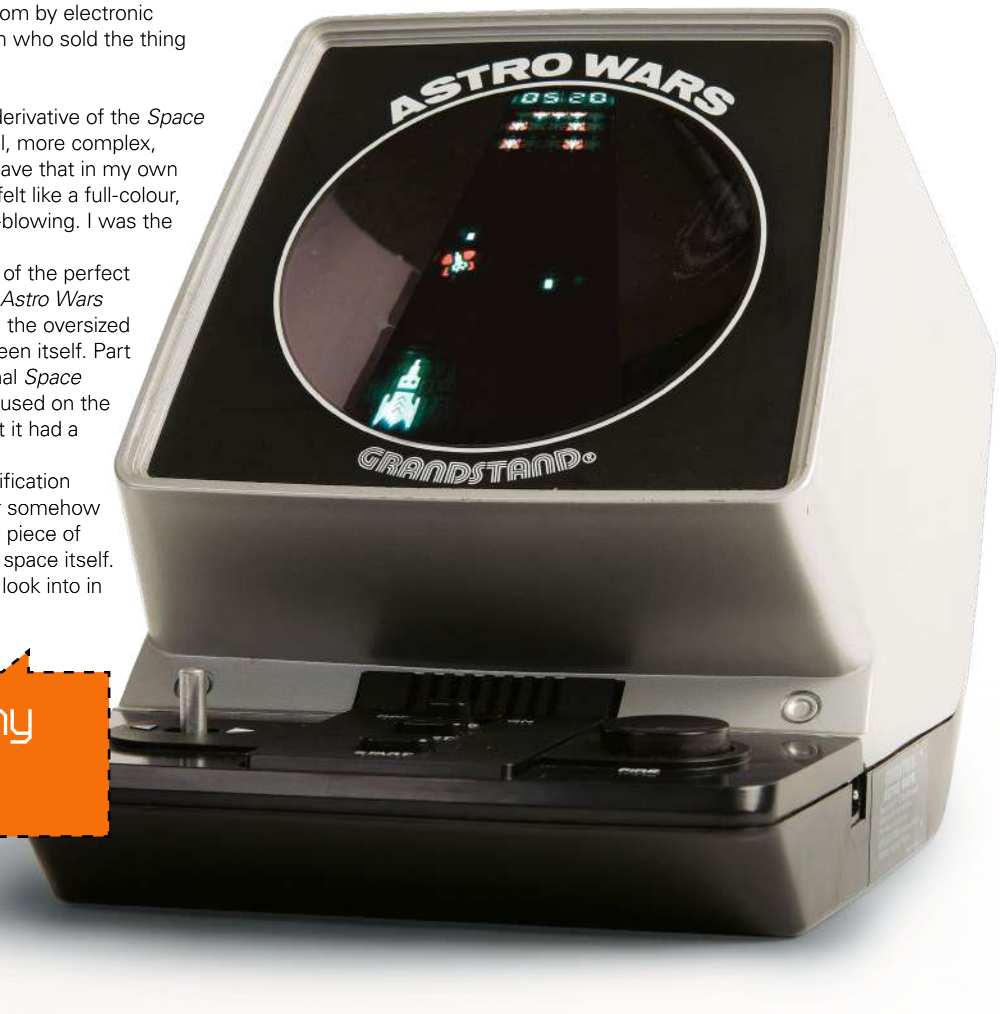
Huge, circular and with a subtle magnification effect that made the VFD display appear somehow more otherworldly. It felt like a bona-fide piece of sci-fi technology, as if I was peering into space itself. Remember that thing Mr Spock used to look into in *Star Trek*? He was playing *Astro Wars*.

Before getting my own, I'd first laid eyes on it at a cousin's house. From that point onwards I knew I had to have one. When I finally did, I played it so relentlessly, it became the first game I can remember seeing when I closed my eyes to sleep at night (the second, not that you're counting, was the Atari ST version of *Castle Master*, for some reason).

So that's all I wanted to say really: just a quick shout out to a game that – derivative as it might've been – deserves its place in the Hall Of Gaming Fame, because it was a near-perfect recreation of an experience that – in 1981 – you could otherwise only get in an arcade. Iconic hardware, iconic visuals, iconic sound, iconic gameplay.

Incidentally, before I leave you, it might be worth stating here that in 2004 *Ob-La-Di, Ob-La-Da* was voted the worst song of all time in a poll ran by, of all people, Mars (yes, the chocolate company). That's even lower than *Diamond Lights* by Glenn Hoddle and Chris Waddle, which came in at a respectable number four. There's no accounting for taste. *

> “I was the envy of all my imaginary friends”



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» Here's Neil Thomas in the RMC studio, with Trevor The Cheetah Tortoise joystick.

» Here's the exterior of The Cave, in a rather picturesque part of the country.

Neil Thomas

The popular YouTuber branches out into the exhibition business with The Cave

If you watch Youtube you'll be well aware of Neil Thomas as he's the host of RMC - The Cave, a popular YouTube channel that has become well-known in the community for showcasing retro gaming curiosities, as well as providing tips on repairing, restoring and upgrading classic hardware and even games. Now he's embarking on brand-new ventures, working with Stoo Cambridge to create a new colouring book showcasing old machines, in aid of a permanent retro gaming exhibition space called The Cave. We asked him a few questions to find out more.

Tell us about the inspiration behind *The Colouring Book Of Retro Computers*?

The goal was to raise funds to complete the build of The Cave, a retro computer and gaming exhibition. Instead of asking for funds to help, we wanted to produce something fun for people to receive on the understanding they were also helping to build the exhibition. It was amazing to see people rally behind the idea when the Kickstarter went live and by the end of it, we had enough to take The Cave to a level we couldn't have ever imagined.

How did you get Stoo Cambridge involved with the project?

I'd worked with Stoo on a previous book named *Retro Tea Breaks* in which he created pixel portraits of influential people in the games industry. Stoo was keen to show the world that he's "not just a pixel artist", in his words, so this seemed like a great opportunity for him to flex his paintbrush and he did a fantastic job. Many people don't want to colour their books in because they like the art so much. Thankfully there is a digital version too so they can print off extra pages to colour.

Who took the reference photos for the book?

Reference photos were taken in The Cave from our own collection. We wanted to make the images more interesting by showing the insides of the machines, so several days of taking machines apart and trying not to lose screws were involved but I think it was worth the effort.

You now have The Cave open in Chalford, Gloucestershire. Why did you decide to open this?

I've been incredibly fortunate in the support I receive in running my YouTube channel and I've always felt a responsibility to give back and to try to inspire newcomers to the hobby. Opening the doors to The Cave is my way of sharing the collection, much of which was donated by viewers, while helping us to fund further work on preserving, protecting and sharing the tech history we all love.

How did you pick the location?

It was a whirlwind of fortunate events. I was working from a small basement office in Wiltshire, I arrived one day to see a planning application notice to convert it into residential property. I had to find somewhere new, quickly. As luck would have it the owners of the mill, an electronics firm named Heber Ltd saw my dilemma and we got chatting. It turned out they have a rich history in arcade game hardware and a staff of retro fans so we hit it off right away, and before I knew it I was renting the top floor. It was a risky step to take on such a large space but the support of my community of 'Cave Dwellers' was behind me and willing me on, so I went for it.

How long has it taken to set up? Did you have any unexpected challenges along the way?

It took a year to develop it from an empty open-plan office into the space we have today. With hindsight it was a much bigger job than I'd anticipated but each progress update video we released was met with such enthusiasm that it drove us on. Much of the build took place during lockdowns and COVID-19 uncertainty, so we did have challenges along the way, not least a big jump in the price of building materials and their availability. The exhibition desks we built at the end of the project cost 80% more to build than they did at the start of it as the price of wood shot up. We also had to learn a lot of skills along the way, we're accomplished shop fitters now thanks to the recreated game shop in the exhibition.

What can visitors expect to see there?

The Cave is a hands-on retro day out. We encourage people to pick up, read and play on everything they see. We have approximately 30 vintage systems ready to sit at and try ranging from the familiar ZX Spectrum to the rare Japanese Sharp X68000.

A very popular area is the recreated shop, a time warp back into your favourite videogame shop filled with cassettes, cartridges and big box games all looking like new, some of which you can zap with a barcode scanner to play. We have a battery-powered tabletop and handheld gaming area, and a library of magazines from the Seventies to the present day (including **Retro Gamer**) to thumb through.

Some items are a little too rare or fragile, so we do have a museum area for those items, and as YouTube is integral to the success of The Cave we have the studio area in which I'm happy to share with people our latest projects, equipment and tips. The Cave is relaxing, air-conditioned and we have a nice café. We're determined not to come across as a stuffy computer club, it's a welcoming retro retreat for all to enjoy.

Despite only just completing the build we would next like to create 'The Secret Arcade' area, filled with classic, original arcade cabinets to play. We're hoping the success of opening up The Cave to visitors will help us to afford that goal. If you know of any good arcade suppliers please let us know!

How did the grand opening go?

It was wonderful and taught us that the space works well. Visits are limited to a maximum of 30 people per session which means nobody is waiting to try a system out and I have time to chat to everyone and challenge them to a game. Based on feedback we're working on some short 'trolley talks' to wheel out so that guests can enjoy some of the more unusual items from our archives, and in the longer term we're planning events with guest speakers from the industry. There will always be something new to enjoy.

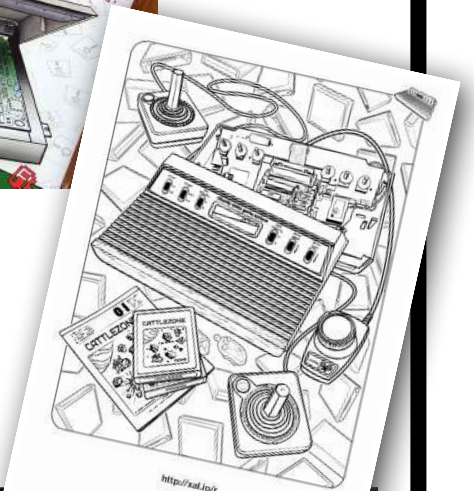
Where can readers find more information on your projects?

Visit RMCretro.com and click on 'Visit The Cave' where you can see all of the build videos and book a ticket to visit. You can also subscribe to my channel at youtube.com/rmcretro. You can support The Cave and buy *The Colouring Book Of Retro Computers* at RMCretro.store. *

» This is the sort of thing you can expect to see in The Cave – a C64 here, a CD-i there. [I love that green Amiga - Ed]

» Here's the colouring book in its printed form. Every copy sold contributes to the development of The Cave.

» The photography session shown at the bottom of this page resulted in this page of the book, taken from the PDF version.



> "We encourage people to pick up, read and play on everything they see"
> **NEIL THOMAS**

» Stoo Cambridge hard at work photographing a topless Atari 2600. You can see the TIA (Television Interface Adaptor) and everything.

BACK TO THE NOUGHTIES

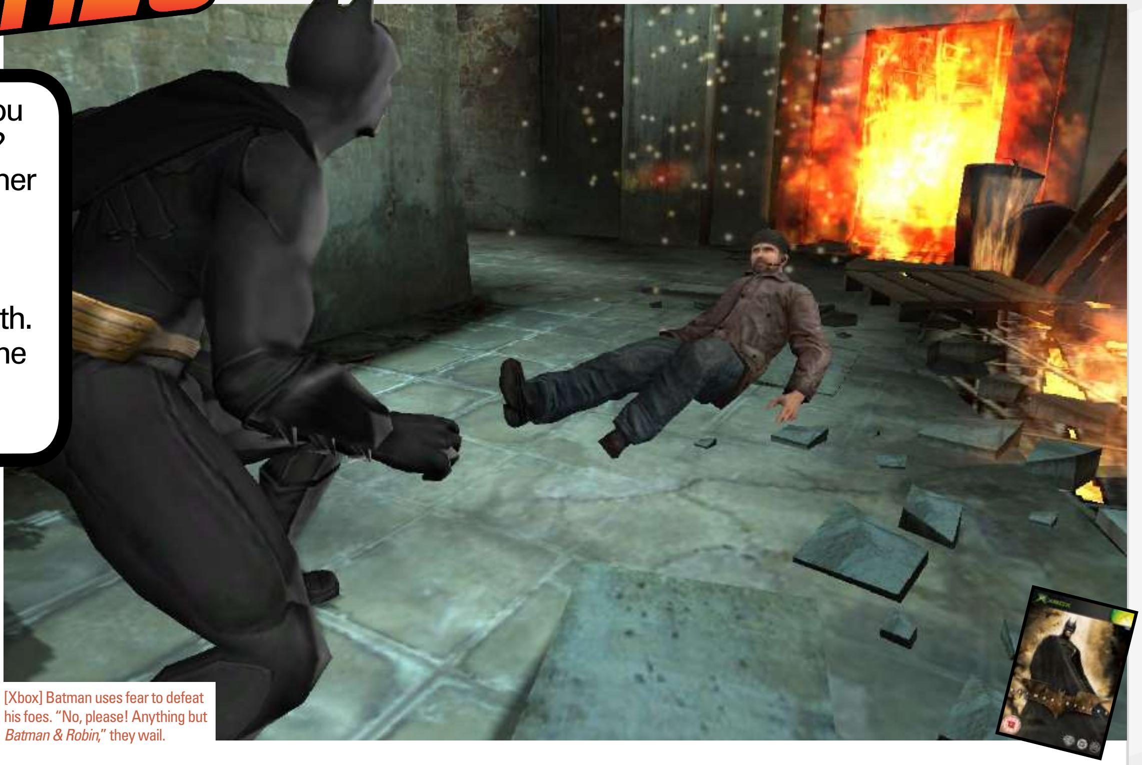
AUGUST 2005 – How do you quickly quell E3 excitement? Why, with a standard summer software slump, primarily pepped up by the presence of Killer 7's multifaceted murderer Harman Smith. Nick Thorpe fires up the time machine to relive the thrills

NEWS AUGUST 2005

Two prominent British politicians died within days of one another in August 2005. Firstly, on 6 August, Robin Cook passed away at the age of 59 after suffering a heart attack. Cook had served as a Labour MP since 1974, and became foreign secretary under Tony Blair in 1997. He became leader of the House Of Commons in 2001, but resigned from the cabinet in 2003 due to his opposition to going to war in Iraq.

Mo Mowlam had served as Labour MP for Redcar from 1987 to 2001, and was made secretary of state for Northern Ireland by Tony Blair in 1997. She was seen to be a key figure in the negotiations leading to the Good Friday Agreement, a significant step in the peace process in Northern Ireland. In 1999, she became cabinet office minister. She passed away at 55 on 12 August, as a result of a brain tumour first diagnosed two months before the 1997 general election.

On 29 August, Hurricane Katrina caused over 1,000 deaths and enormous damage in the south east of the USA. The vast majority of the devastation was felt in New Orleans, due to a combination of a late evacuation order and major damage to the city's flood defences. Approximately 80% of the city was flooded and the emergency response was slow and poorly co-ordinated. Other regions were also hit, with over 200 deaths in Mississippi and smaller numbers in Florida, Georgia, Alabama and Kentucky.

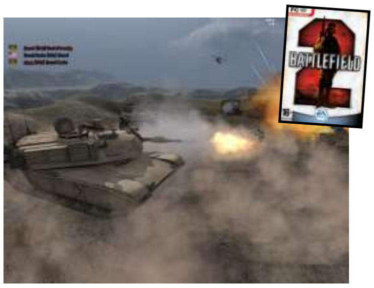

[Xbox] Batman uses fear to defeat his foes. "No, please! Anything but *Batman & Robin*," they wail.

THE LATEST NEWS FROM AUGUST 2005

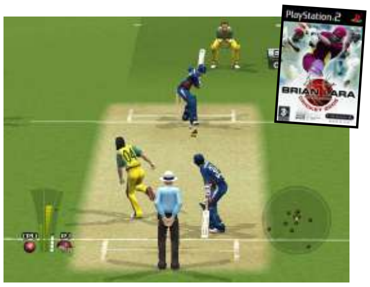
With the big rush of E3 news over, every camp got to compare its shiny new toys – or rather, fret over the future. Xbox owners got to worry about whether the imminent launch of the Xbox 360 meant a premature end for the big black box, with Microsoft's head of UK Xbox marketing assuring users that "all the major publishers will continue to release lots of great games for a long time to come". PlayStation enthusiasts worried over whether they'd really be using a big boomerang with buttons to play their next console, with the *Official PlayStation 2 Magazine* claiming that "nothing screams 'the future of games' more than the silver banana here". Meanwhile, Nintendo fans were assured by *NGC* that, "*Zelda: Twilight Princess* will be out in the UK by November and, by the looks of things, the game is set for a simultaneous worldwide release."

Of course, everyone had to focus on the future because the present was not tremendously exciting. However, in the same way that the sun occasionally makes its presence known during even the dreariest British summer, a couple of games did brighten up the software landscape. On the PC, the undisputed game of the month was *Battlefield 2*, which improved on the large scale multiplayer battles of the original. *Edge* and *games™* each gave it 9/10, and *PC Gamer* gave it 93%. According to *games™*, "It's the game's fundamental shift in focus from pure action to strategic play that really takes *Battlefield 2* above and beyond the original." *Edge* felt that, "The 12 warzones are ambitious to the point where the term 'maps' feels inadequate," and praised them for being "meticulously detailed". PC Gamer's praise was tempered by the warning that "you're going to need an absolute monster of a PC to get this running".

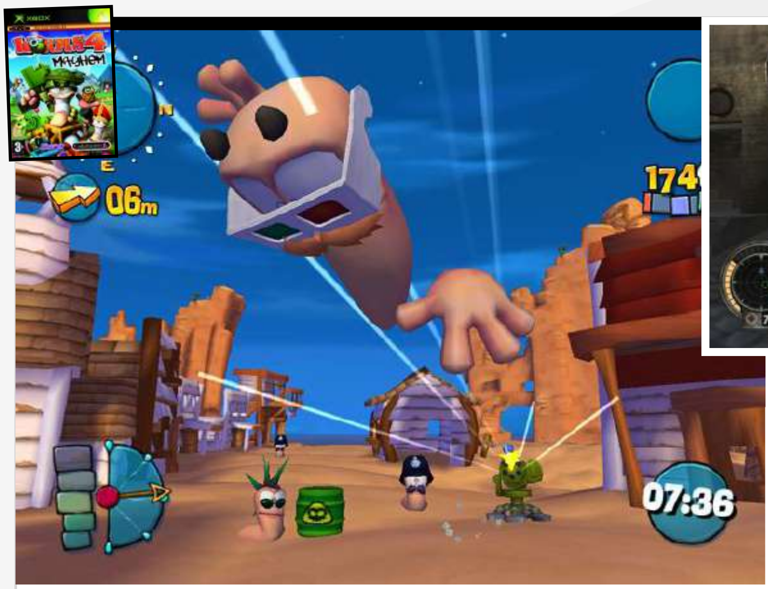
EA's attempts at summer console blockbusters were not nearly as critically beloved, and both were actually rather polarising. Its latest first-person shooter *Medal Of Honor: European Assault* received massively varied scores, with *Cube*'s 8.8/10 ("It is fun to shoot Nazis") contrasting heavily with *Edge*'s 3/10 ("The enemy AI is ludicrously inept"). The film tie-in *Batman Begins* earned 6/10



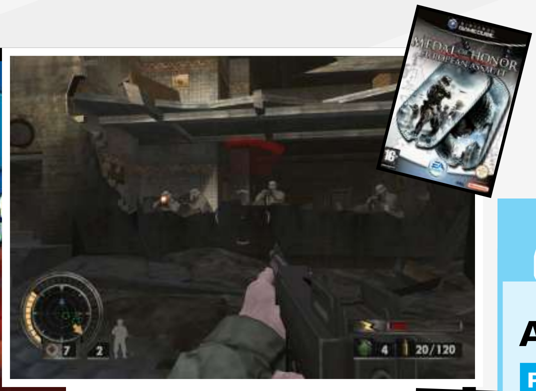
[PC] *Battlefield 2* was the sole game this month that received unanimous scores of 9/10 or higher.



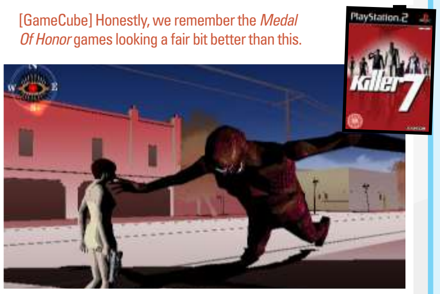
[PS2] Apologies to our overseas readers for excessive Britishness, we'll return to your gridiron soon.



[Xbox] This is *Schrödinger's Worms* – it's both a good and a bad *Worms* game until a review is observed.



[GameCube] Honestly, we remember the *Medal Of Honor* games looking a fair bit better than this.



[PS2] Was Suda51's breakthrough game more style than substance? *Play* thought so, but other mags disagreed.

in *Edge*, 5/10 in both *Official PlayStation 2 Magazine* and *XBM*, and 41% in *NGC*, which bemoaned "dreadful level structure, insane puzzle logic and some horribly unforgiving bits". *Official Xbox Magazine* liked it because, "It looks quite OK, the way it plays is extremely simple and you won't ever get lost, confused or angry," awarding it 8.2/10.

Indeed, many of this month's releases received a mixed reception. Take *Worms 4: Mayhem* as an example. Team17's latest 3D attempt at its signature franchise was awarded 5/10 by *Official PS2*, which felt that "the classic *Worms* gameplay just doesn't work in 3D". Conversely, *OXM* gave it 8.4/10 and said that it was "what Worms 3D should have been". *XBM* and *games™* each gave it 6/10, *PC Gamer* gave it 73% and *Play* gave it 82%. *OXM* scored *The King Of Fighters 2002* 5.4/10 and claimed that it "should be part of a compilation", helpfully suggesting 2000-2005 in spite of two of those years having no games. It earned 7/10 in both *games™* and *Official PS2* and 82% in *Play*, which called it "another great game in the series". *Brian Lara International Cricket 2005* was "challenging enough to keep you occupied for ages" (*Official PS2*, 8/10) or "ultimately ruined by poor AI" (*PC Gamer*, 60%).

In fact, only three console releases received really high scores this month – and one of those was the *Halo 2 Multiplayer Map Pack*, which scored 10/10 in *XBM* and 9/10 in *OXM*, with the latter feeling that its £14.99 price tag was "stunning value for money". *Fire Emblem: The Sacred Stones*, a tactical RPG for the Game Boy Advance also scored well, earning 7/10 from *Edge*. It felt that permanent character deaths would make "the most even-tempered gamer scramble for the off switch", but that players would quickly return. *Cube* said that, "Intelligent Systems has done a great job with the range of feelings and emotions that run throughout *Fire Emblem*," and scored it 8.4/10.

That left GameCube and PS2 owners with the delights of *Killer7*. The game was broadly praised, earning 9/10 from *games™*, 9.0/10 from *Cube*, 84% from *NGC* and 8/10 from *Edge*. *NGC* noted that it was "basically a shooting gallery broken up with puzzles", but felt that it was "one of this generation's most unusual and unforgettable adventures". *Cube* cautioned that "it might just be a little too far off the beaten track for Average Joe". Indeed, a dissenting opinion came from *Play*, which awarded the game 68% and described it as "a quirky curiosity, not always enjoyable to play and not always fair", summarising it as "a good-looking disappointment".

Join us again in the next issue as the countdown to the next generation continues. *

CHARTS

AUGUST 2005

PLAYSTATION 2

1 – Medal Of Honor: European Assault (EA)
2 – Juiced (THQ)
3 – Star Wars Episode III: Revenge Of The Sith (LucasArts)
4 – Lego Star Wars (Eidos)
5 – Area 51 (Midway)

XBOX

1 – Grand Theft Auto: San Andreas (Rockstar)
2 – Star Wars Episode III: Revenge Of The Sith (LucasArts)
3 – Forza Motorsport (Microsoft)
4 – Area 51 (Midway)
5 – WWE Wrestlemania 21 (THQ)

GAMECUBE

1 – Resident Evil 4 (Capcom)
2 – Star Fox: Assault (Nintendo)
3 – Metroid Prime 2: Echoes (Nintendo)
4 – Mario Party 6 (Nintendo)
5 – FIFA Street (EA)

MUSIC

1 – You're Beautiful (James Blunt)
2 – Bad Day (Daniel Powter)
3 – All The Way (Craig David)
4 – Ooh La La (Goldfrapp)
5 – Belly Dancer (Bananza) (Akon)

THIS MONTH IN…

Official PlayStation 2 Magazine

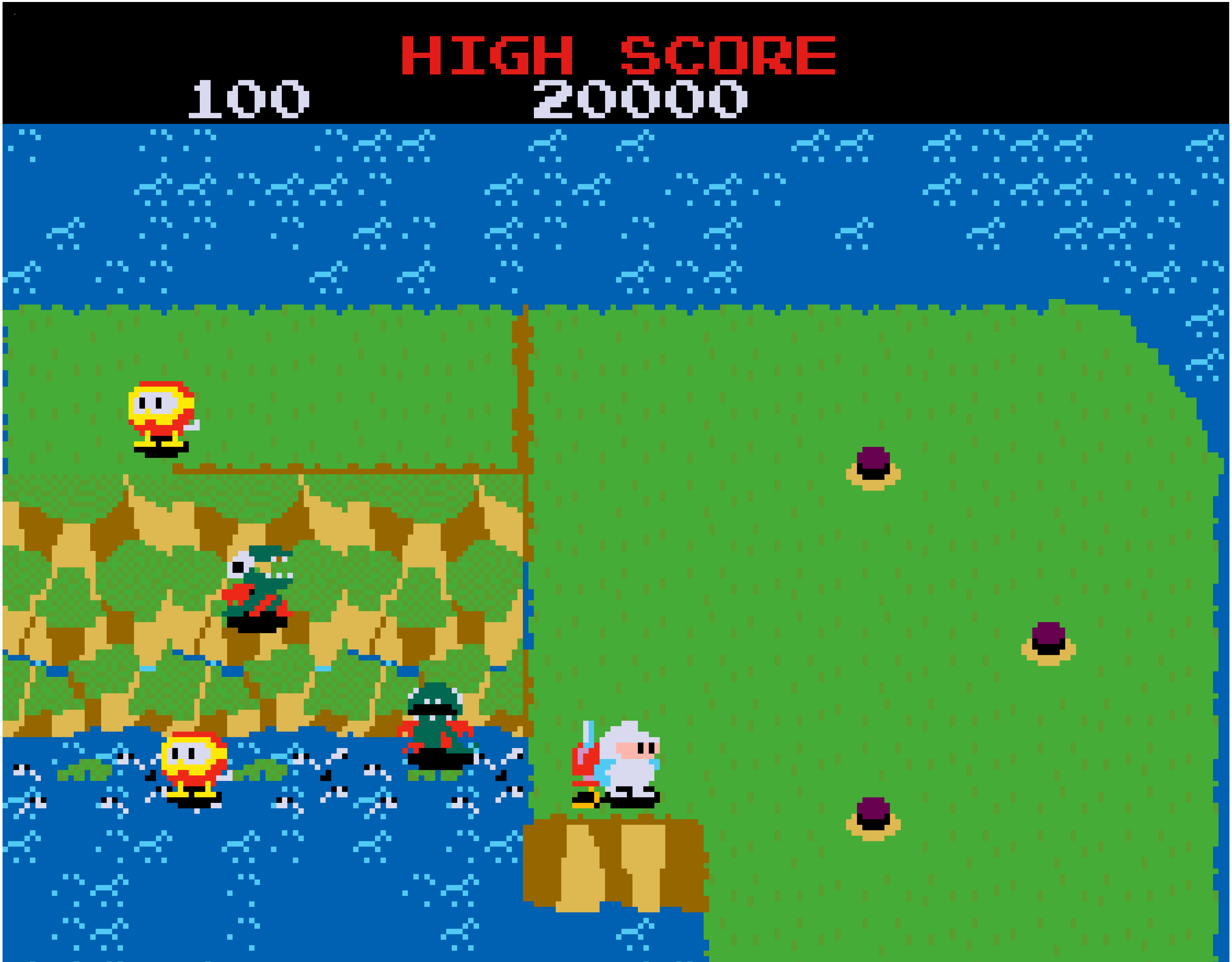
When can we buy a PS3? "Sony says the machine will be out in spring 2006," claims the magazine, "Don't say, 'Yeah that means 2007, really,' just yet." It also adds that "Sony did go on record to debunk a rumour that said it would cost over £400." The PS3 launched in the UK in March 2007, for £425.

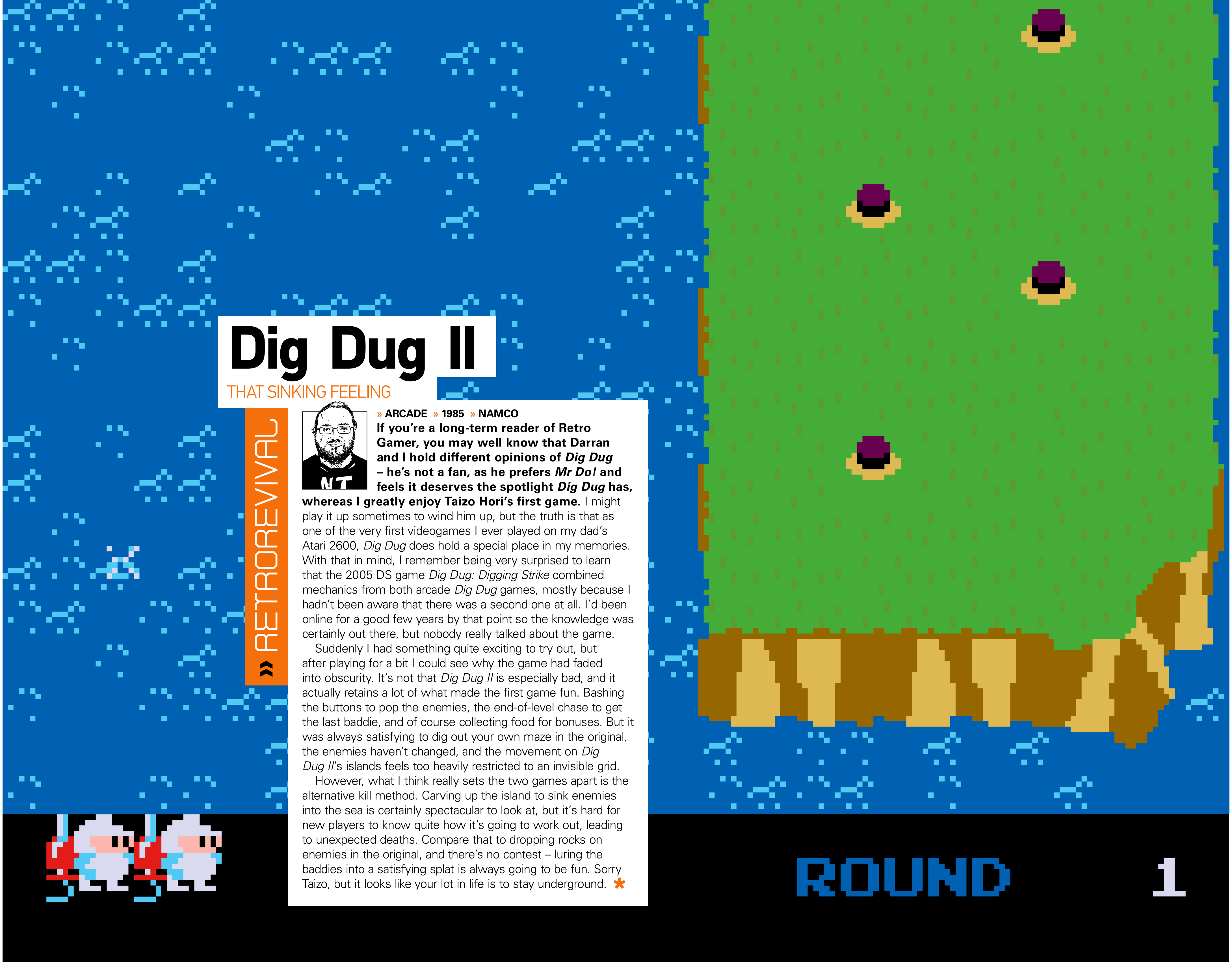
Cube

The well of optimism at *Cube* has officially run totally dry. Predicting an October 2006 PAL release for the Revolution at the very earliest, it claims, "In the best case scenario GameCube owners will still have a six-month period with no worthwhile releases. There's no silver lining for this particularly evil storm cloud… it's just the way it is."

Retro Gamer

The latest issue of everyone's favourite classic gaming publication arrives without incident, with a neat *The Last Ninja* cover disc. But then the 19th issue doesn't arrive as expected, and **Retro Gamer** isn't present at the Classic Gaming Expo UK event in Croydon. Could this be the last we see of **Retro Gamer**? (Spoiler: no, but do play along.)


HIGH SCORE
100
20000



» RETROREVIVAL

Dig Dug II

THAT SINKING FEELING

» ARCADE » 1985 » NAMCO

If you're a long-term reader of Retro Gamer, you may well know that Darran and I hold different opinions of *Dig Dug* – he's not a fan, as he prefers *Mr Do!* and feels it deserves the spotlight *Dig Dug* has, whereas I greatly enjoy Taizo Hori's first game. I might play it up sometimes to wind him up, but the truth is that as one of the very first videogames I ever played on my dad's Atari 2600, *Dig Dug* does hold a special place in my memories. With that in mind, I remember being very surprised to learn that the 2005 DS game *Dig Dug: Digging Strike* combined mechanics from both arcade *Dig Dug* games, mostly because I hadn't been aware that there was a second one at all. I'd been online for a good few years by that point so the knowledge was certainly out there, but nobody really talked about the game.

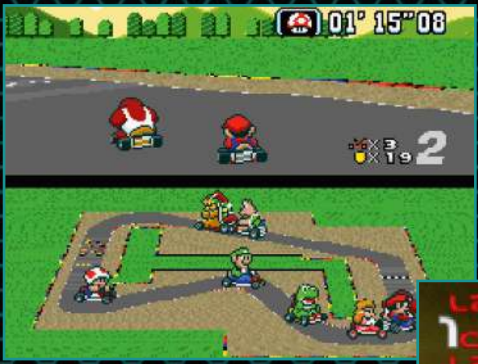
Suddenly I had something quite exciting to try out, but after playing for a bit I could see why the game had faded into obscurity. It's not that *Dig Dug II* is especially bad, and it actually retains a lot of what made the first game fun. Bashing the buttons to pop the enemies, the end-of-level chase to get the last baddie, and of course collecting food for bonuses. But it was always satisfying to dig out your own maze in the original, the enemies haven't changed, and the movement on *Dig Dug II*'s islands feels too heavily restricted to an invisible grid.

However, what I think really sets the two games apart is the alternative kill method. Carving up the island to sink enemies into the sea is certainly spectacular to look at, but it's hard for new players to know quite how it's going to work out, leading to unexpected deaths. Compare that to dropping rocks on enemies in the original, and there's no contest – luring the baddies into a satisfying splat is always going to be fun. Sorry Taizo, but it looks like your lot in life is to stay underground. *

THE EVOLUTION OF WipE

AFTER MAKING GAMING HIP IN THE MID-NINETIES, THE FUTURISTIC PSYGNOSIS RACER WIPEOUT WENT ON TO INSPIRE A LONG LINE OF POPULAR FOLLOW-UPS. KEY CREATIVES, INCLUDING NICKY PLACE, ROB FRANCIS AND KARL JONES EXPLAIN HOW THE LONG-RUNNING SERIES KEPT ITS COOL

WORDS BY
RORY MILNE & DARRAN JONES



» [SNES] Although *WipEout* has its own style, its mechanics are largely based on *Super Mario Kart*.

» [PlayStation] Before *WipEout*, Pygnosis had made a string of other sci-fi games such as the shoot-'em-up *Novastorm*.

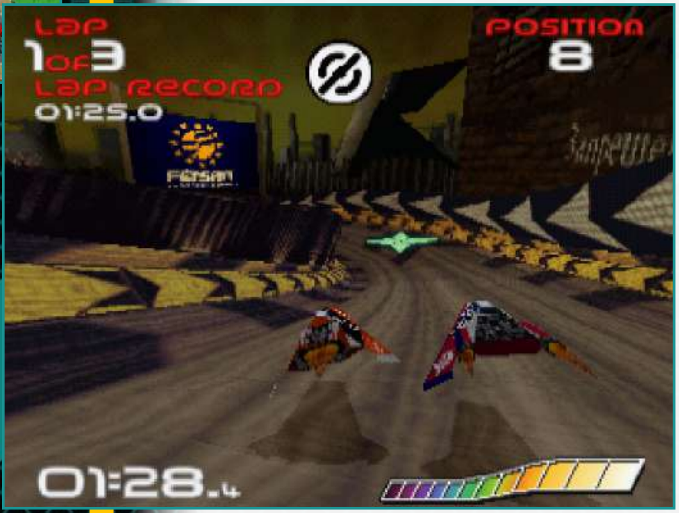
Even among a strong line-up of European PlayStation launch titles, *WipEout* stood out from the crowd. The Psygnosis game's techno soundtrack, futuristic polygon visuals and breakneck speed were such a novel combination that it seemed like an immaculate conception. This was far from the case, however, as its designer Nick Burcombe had borrowed the game's mechanics from a SNES racer, and its concept artist Jim Bowers' gravity-defying ships had made their debut on the silver screen, as former Psygnosis creative Nicky Place points out.

» [PlayStation] A CGI-rendered *WipEout* prototype appeared in the movie *Hackers* prior to the release of the PlayStation game.

"Nick Burcombe used to play *Mario Kart* while listening to really loud dance music, and he thought how ace it would be to develop a game that put those two things together," Nicky recollects. "Around that time, Jim Bowers was doing a sequence for the film *Hackers*, where the characters played a game with anti-grav racing ships, and that brought him and Nick together. Jim had also been instrumental in the look of the shoot-'em-ups *Microcosm* and *Novastorm*, but the shooting in *WipEout* was because of *Mario Kart*."

> "NICK BURCOMBE USED TO PLAY MARIO KART WHILE LISTENING TO LOUD DANCE MUSIC, AND HE THOUGHT HOW ACE IT WOULD BE TO DEVELOP A GAME THAT PUT THOSE TOGETHER"
> NICKY PLACE

In fact, *WipEout* had near-identical power-up mechanics to the popular SNES title. It even depicted its power-ups as icons painted onto its courses, which led to greater involvement in the project by its renowned cover artists. "That was a key element in *Mario Kart* – driving over speed boosts or whatever," Nicky acknowledges. "It was that thing of trying to force players to be on a particular part of the track. The icons were all developed by The Designers Republic, which was originally just going to be doing the packaging, but we wanted to make its designs a really key part of the game's aesthetics. So first and foremost it was about mechanics, and secondly we needed to think about what things were going to look like."



» [PlayStation] The future depicted in *WipEout* incorporates everything from idyllic countryside settings to dark dystopian vistas.

But while the collectible single-use weapons imprinted on *WipEout*'s tracks were down to Nintendo's racer, the Psygnosis title's ships were a product of the firm's earlier work. "Jim was developing lots of really cool concepts," Nicky enthuses. "He was driving a lot of the visual output and conceptual art at Psygnosis, as well as some of the tech he was using. He was the concept artist for the anti-grav ships, which he had built this amazing 'scratch' model for. I think the ships lent themselves so well to the gameplay. The idea was that you could actually *fly* a lapped track, which meant we didn't have to create the dynamics of a car stuck to a course." ▶

out
EG-X
TECHNOLOGIES
LINKED TECHNOLOGY
FEISAR

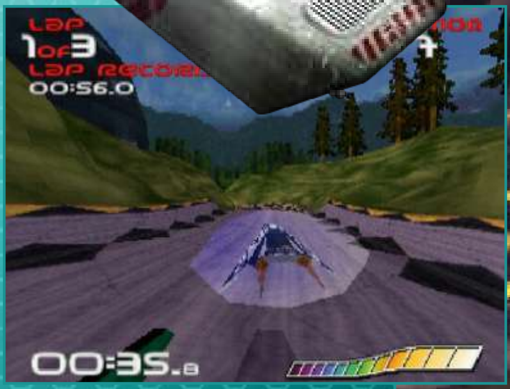
» Artist Nicky Place helped shape the look and style of the first three PlayStation *WipEout* titles.

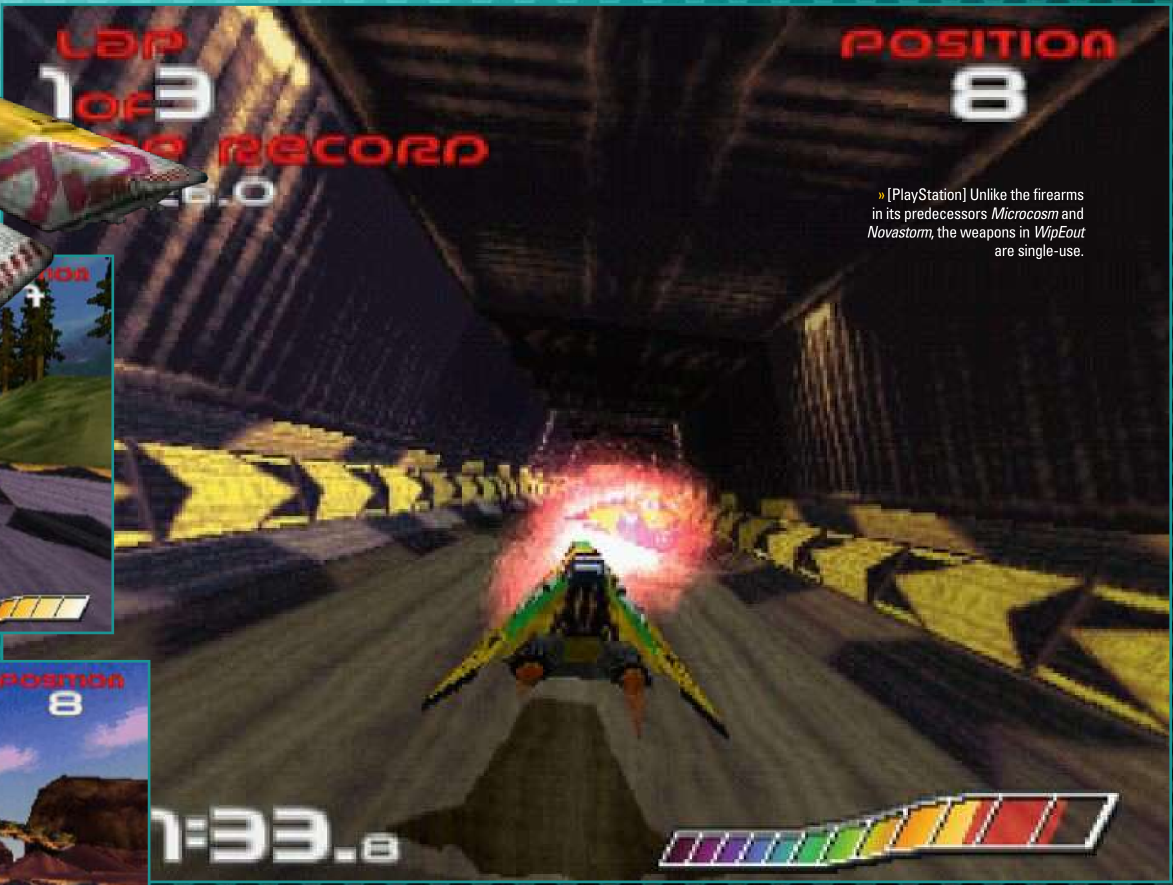
» Rob Francis had design roles on *WipEout 2097, WipEout 64* and *WipEout Fusion.*

» *Wip3out* was one of the earliest projects that coder David Jefferies contributed to.

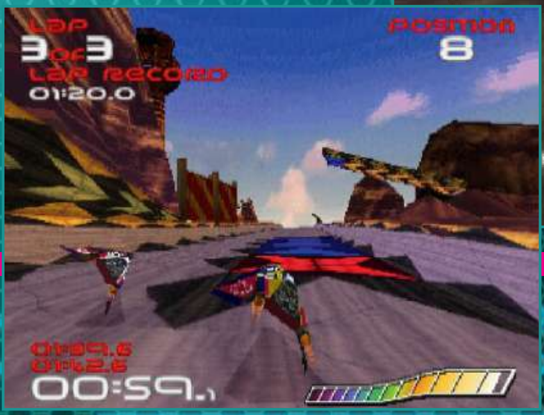
» After playtesting *WipEout Fusion,* Karl Jones was a designer on *Pure, Pulse, HD, HD Fury* and *2048.*

» Nick Roberts is head of studio at Amuzo Games and has overseen work on *WipEout Rush* and *Merge.*

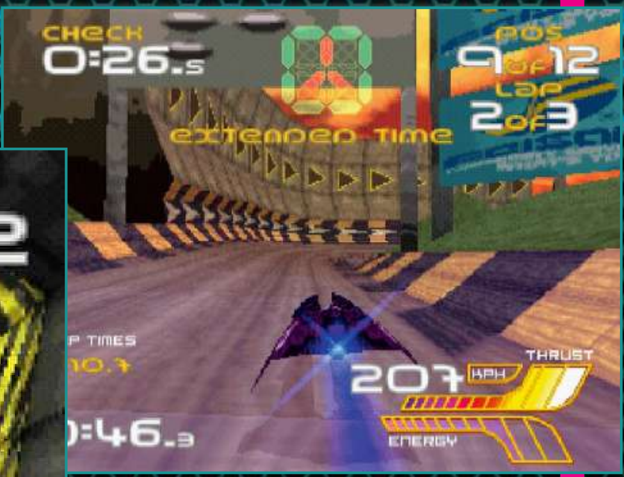

LAP
1 OF 3
LAP RECORD
00:56.0
00:35.8

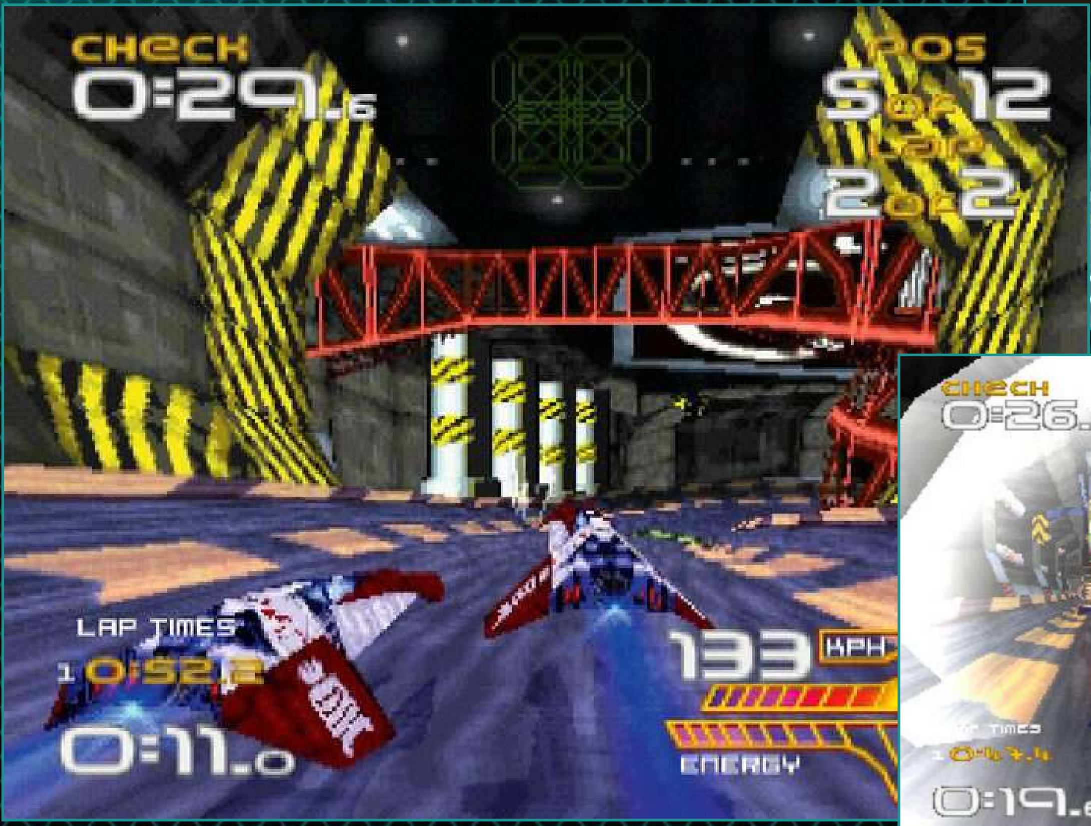

LAP
1 OF 3
LAP RECORD
POSITION
8
1:33.8

» [PlayStation] Unlike the firearms in its predecessors *Microcosm* and *Novastorm*, the weapons in *WipEout* are single-use.

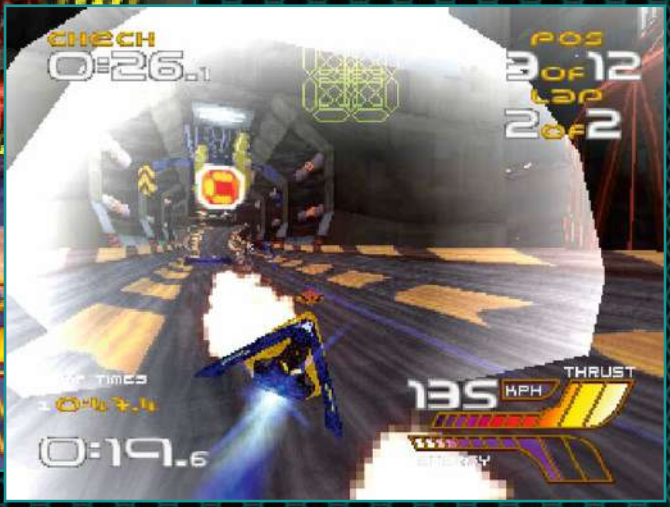

LAP
3 OF 3
LAP RECORD
01:20.0
POSITION
8
00:59.1

» [PlayStation] The anti-grav ships in *WipEout* allow you to pull off banked turns around the tightest of bends.


CHECK
0:26.5
POS
9 OF 12
LAP
2 OF 3
EXTENDED TIME
THRUST
207 KPH
ENERGY


CHECK
0:29.6
POS
5 OF 12
LAP
2 OF 2
LAP TIMES
1 0:52.2
0:11.0
133 KPH
ENERGY

» [PlayStation] Unlike in the original, your ship blows up in *WipEout 2097* if you take enough damage.

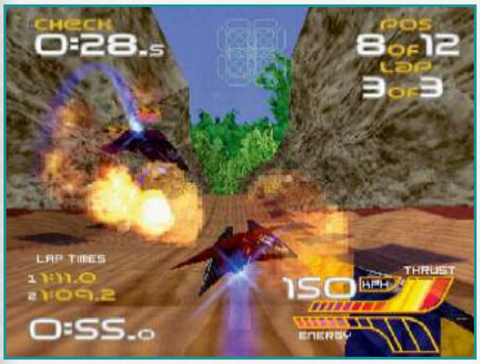

CHECK
0:26.1
POS
3 OF 12
LAP
2 OF 2
THRUST
135 KPH
0:19.6

Further freedoms stemmed from *WipEout*'s futuristic setting, although Nicky was keen that it should have a realistic look that wasn't too dissimilar to the 20th century. "The opportunities were that it was fun just to create things that had never been thought of before," Nicky reflects. "So billboards in the future, and things like giant walkways. But it was very much rooted in normality, even though it was futuristic, so there was stuff that you could have just been driving around. We were also playing with the idea that *yes* you might have these great metropolises, but there would also still be some natural world left. So there were rolling hills and mountains."

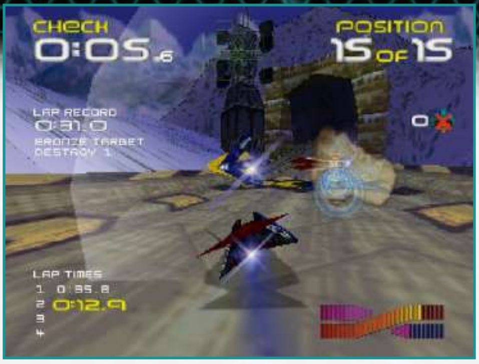
This leaning toward rural locations was driven by expediency as much as design, so much so that all but one of *WipEout*'s tracks was set in a natural environment. "There were questions about how we could make *big* things quickly, and I think Nick suggested that a track might be heading inside a mountain," Nicky ponders. "Whereas if we had made a big city there would have been a lot of detail we'd have had to put in there to make that believable. We could do *elements* of that when you got a very close view, but where you got a wide view we needed something *big* that wasn't going to take us forever to model."

The race to model courses was driven by the European PlayStation launch, which came nine months after work on *WipEout* had started, at which point it became the system's killer app. "The styling wasn't that far removed from the stuff that we had done before, the Psygnosis output was very sci-fi/futuristic, but then *WipEout* was a real shift," Nicky reviews. "It was bringing in that fusion of graphic elements, gameplay and music. A lot of people absolutely loved *WipEout* because of its music; that really hit a nerve. Gaming had been quite niche, then the PlayStation – and *WipEout* – were instrumental in making it really big."

Given the buzz around *WipEout*, its developers would have been aware of its success even if they hadn't left their Liverpool office, but they made a point of marking the occasion. "I remember we went over to Manchester on the launch day to a big HMV, and it was a big thing," Nicky says with a smile. "People were queuing up to buy it, so we just went over to see it in the store. I remember us all standing around looking and thinking, 'Wow!' Because *WipEout* was one of just six games, or whatever it was, and we couldn't believe we had managed to do it. It was an incredibly short turnaround."



» [PlayStation] Of the new weapons introduced in *WipEout 2097*, the Quake Disruptor is the most memorable.



» [N64] *WipEout 64* brings combat-focused challenges to the series, where you dispatch quotas of opponents.

One positive side effect of *WipEout*'s hurried creation was that a refined sequel was an obvious move, and as former Psygnosis designer Rob Francis points out there were elements of the original game's combat that could be quite easily built-on. "*WipEout* had weapons that slowed down the ships when they were hit, and so the natural extension to explore in order to make it a more exciting race was to actually *take out* enemy ships – and also to have the risk of being taken out yourself," Rob reasons. "We had a lot of fun with the AG Systems ships, which had the weakest shields. I have fond memories of linking up two PlayStations, so myself and coder Chris Roberts could go one-on-one with those!"

> **"THE QUAKE WASN'T IN THE ORIGINAL DESIGN – GLORY FOR THAT GOES TO CHRIS [ROBERTS]. HE GOT A LOT OF ATTENTION IN THE STUDIO FOR THAT"**
> **ROB FRANCIS**

As well as being fun, playtesting of the *WipEout* follow-up – *WipEout 2097* – also produced one of gaming's most memorable weapons and a useful visual effect. "The Quake wasn't in the original design – glory for that goes to Chris," Rob points out. "He was tinkering around one day, and realised that because of the simple geometry of the main track he could get a nice effect going that would kind of *ripple* down it. He got a lot of attention in the studio for that. You couldn't really escape it, because it was so long. Credit also goes to him for *2097*'s ship trails; you could actually see ships in the distance because of those."

Further enhancements over the original game came in the form of checkpoints that had to be reached before a countdown hit zero, although AI ships were exempt. "The AI couldn't miss a checkpoint because of their system, so basically they were always going to hit them," Rob explains. "More generally, the reason the checkpoints were introduced was really just to add urgency to the races, where you were always pushing forwards. So it was an extra moment-to-moment pressure for the player, but I balanced them fairly generously. So, as long as you were going forward and as long as you didn't get mined or missiled too much you were going to hit them."

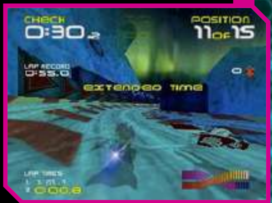
STAGES OF EVOLUTION:
EPIC ENHANCEMENTS
FROM E-PAKS AND STEALTH TO CONTROL JAMMERS

WIPEOUT 2097

CHECK 0:30.4
POS 9 OF 12
LAP 1 OF 2
0:38.0

Unlike the ships in the original, *WipEout 2097*'s ships can take damage, and can ultimately get blown up. The damage taken is reflected by an energy bar, and when it gets low your options are to collect shield power-ups or E-Paks, the second of which restores some of your lost energy.

WIPEOUT 64



You might imagine the Piranha II team's stealth power-up in *WipEout 64* would make its ship invisible to other craft – and it does. But there's more. The stealth enhancement also stops rivals from locking weapons onto Piranha II's vessel, and allows it to fly through opponents' ships.

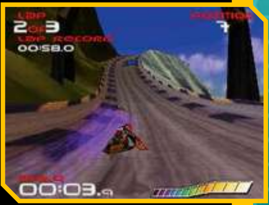
WIPEOUT FUSION

There are a lot of interesting new power-ups in *WipEout Fusion*, and none more so than its Control Jammer. Quite simply, it reverses the steering and air-brakes of whoever it's fired at. Although effective on straights, the best time to use it is when a competitor is on a tricky bend.

CHECK 0:43.7
POSITION 4 OF 15
REAR LOCK
LAP RECORD 1:00.9
LAP TIMES
1 1:00.9
2 0:36.0

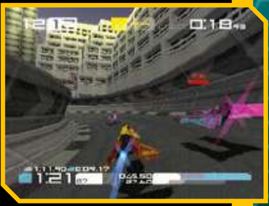
STAGES OF EVOLUTION:
AWESOME ARMAMENTS
SHOCK WAVES, ENERGY DRAINS AND REPULSORS

WIPEOUT



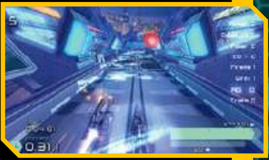
The Shockwave weapon in the original *WipEout* could be seen as the predecessor to *2097*'s Quake Disruptor, in that a ship on the receiving end of a shock wave shakes and becomes uncontrollable for a short while. This doesn't look as impressive, but it can be more effective.

WIP3OUT



Although based on a simple mechanic of topping-up your ship's energy by draining another's, *Wip3out*'s Energy Drain projectile adds strategy to the game's races. Timing is everything, in that the optimal time to make full use of it is when it will take out an already failing craft.

WIPEOUT PULSE



The great thing about *WipEout Pulse*'s Repulsor is that it affects every ship in your immediate field of view. As well as draining some of their energy, a Repulsor will knock nearby rivals off-course, which makes it as effective in the game's combat-based events as it is in its races.

CHECK
0:37.0
POSITION
3 OF 15
LAP RECORD
1:06.6
LAP TIMES
1 1:15.1
2 0:50.4

> "WIP3OUT HAD A GROUNDED LOOK; IT WAS A FUTURE OF SOMEWHERE YOU ALREADY KNEW. THAT WAS BECAUSE NICKY AND MIKE LOVED FUTURISTIC INDUSTRIAL VISUALS"
> DAVID JEFFERIES

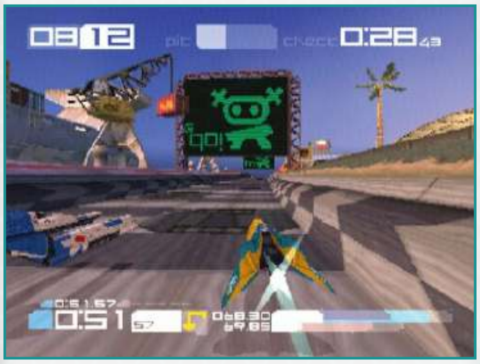
CHECK
0:29.3
POSITION
10 OF 15
LAP RECORD
1:10.5
LAP TIMES
1 0:38.2
2

▶ Like *WipEout* before it, *WipEout 2097* was a hit on the PlayStation and was converted to other systems. Neither game was ported to the N64, but it did get a system exclusive. "*WipEout 64* had an even shorter production time than *2097*, so its courses were all mirror versions of *WipEout* and *2097* tracks," Rob remembers. "An opportunity came up at the studio, and there was a small window to quickly get out a version of N64 *WipEout* that would basically be a mixture of the two previous games on the PlayStation. All we really had time to do was just reverse the geometry, do a quick playtest to see if the tracks worked well in reverse and then dress them."

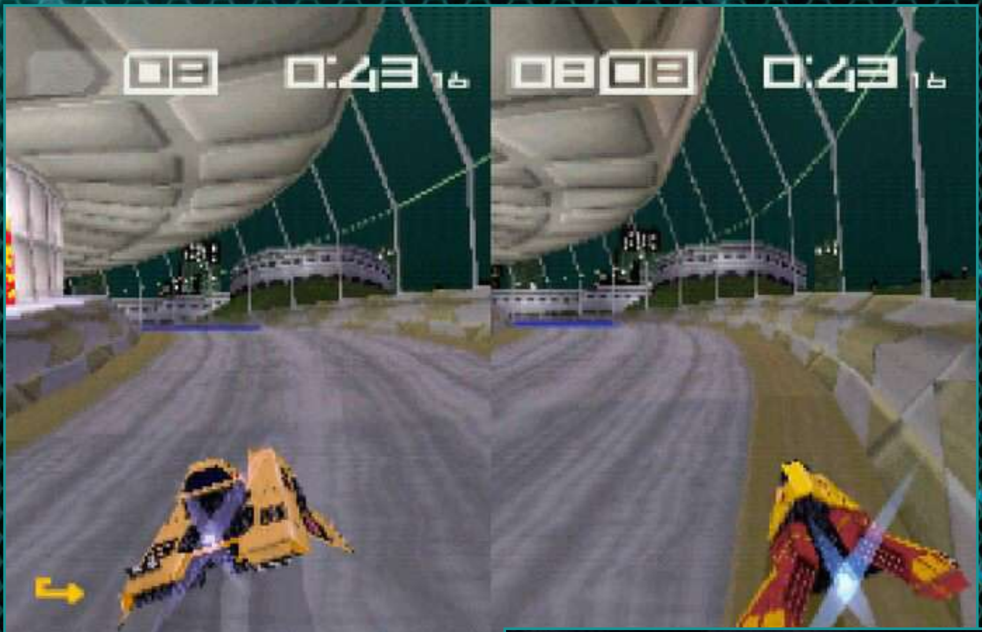
But despite its brief development, ship-specific 'Super Weapons' were introduced in *WipEout 64* to get players to try each craft out, including the unlockable Piranha II. "We knew that everybody had their favourite ship," Rob concedes. "Feisar had easy handling but was fairly slow, AG Systems had faster acceleration, then Auricom was the all-rounder and Qirex handled like an absolute boat, but was fast as hell! So I was trying to introduce something to make each one a little bit more special to give players a reason to explore some of the others. Piranha II was another Chris Roberts creation. I didn't do the handling for that, because only he could fly it!"

Soon after *WipEout 64*'s release, a visually reimagined follow-up was dreamt-up by Nicky Place and The Designers Republic's Mike Place, as coder David Jefferies recalls. "*Wip3out* had a grounded look; it was a future of somewhere you already knew," David observes. "That was because Nicky and Mike loved futuristic industrial visuals, but neither of them liked sci-fi. Another thing was that one of the programmers – Pete Bratcher – got the game to run in high definition, which gave it much cleaner lines, and he wrote some clipping algorithms, so there were no holes or popping. That really influenced the visuals, because we could have beautiful, smooth vector artwork in-game that mirrored Mike's prints."

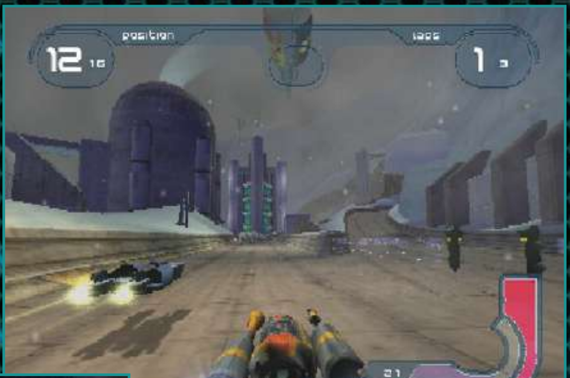
To complement the game's graphical evolution, the track design and gameplay of the previous titles were overhauled, which resulted in real-world structures, combat modes and split-screen multiplayer. "We had a tool that the artists and designers could sketch out tracks with, export

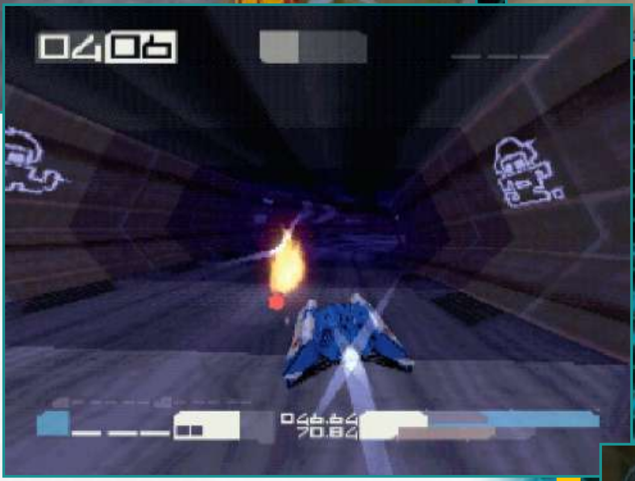


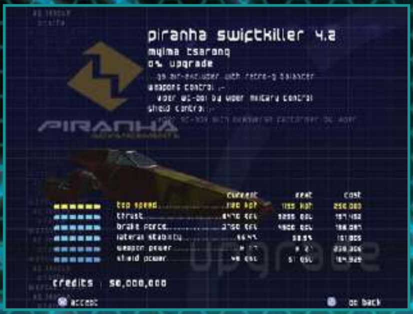
» [PlayStation] The artists on *Wip3out* gave it an industrial look rather than an overtly sci-fi one.



» [PlayStation] Unlike the original game, *Wip3out*'s multiplayer mode doesn't require linking two consoles together.

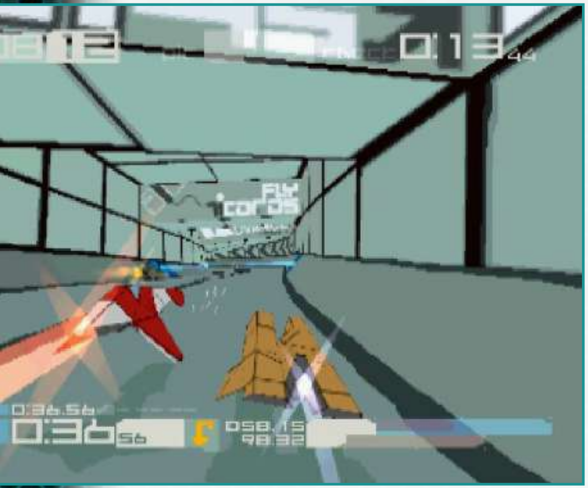






them into the game and race on them, which meant quite fast iteration," David reviews. "The one set in the mall was by Nick Phillips, who was from Sheffield. It had a massive shopping centre called the Meadowhall, and that was why Nick did the big mall in *Wip3out*. Then when we added the split-screen mode we thought a little more battling would be cool – although you could also play the Eliminator mode as a single-player."

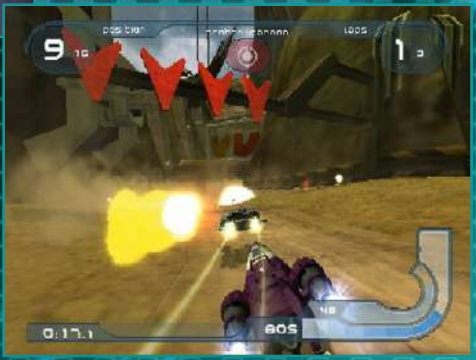
As with other aspects of the project, *Wip3out*'s split-screen two-player challenges came out of the game's tech, but its prototype courses were a product of visual design. "Because *Wip3out* ran in high-def I could put two square split-screens next to each other that were each the resolution of the original *WipEout*," David beams. "That was cool, because you could invite people around, have a few beers and play split-screen multiplayer together. The artists came up with the prototype courses, and they implemented those. They basically took a square texture, and gave it a cream centre and a dark outline around the boundary. Then they textured tracks with that, and it gave them this cool solid wireframe look."



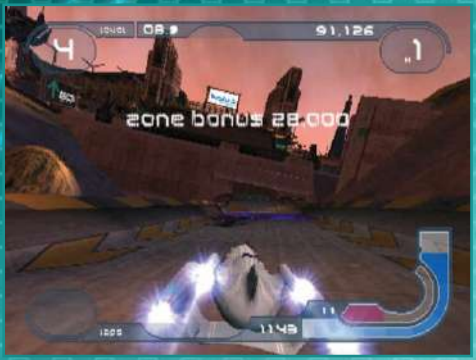
» [PlayStation] *Wip3out* had an updated version for Europe called *WipEout 3: Special Edition* which featured tweaks and extra tracks.

Unsurprisingly, *Wip3out* won plaudits when it came out for its high-definition PlayStation visuals, by which point Rob Francis was imagining multi-course environments for a PS2 sequel called *WipEout Fusion*. "The goal was to get as much reuse of the environments as possible, because we were jumping to higher polygon counts, so the overhead of dressing tracks became much higher," Rob reasons. "Some had wide areas, which was inspired by the open plain podraces in *The Phantom Menace*. But because we couldn't link those to the track the camera had to follow the ship. In the earlier games it had been fixed to the track, which gave that floaty feel to the ships, so we lost that in *Fusion*."

A major gain for *WipEout Fusion* was its League mode, where credits were won for skill, lap times and damaging enemy ships, which could then be spent on upgrades. "We wanted to motivate players to upgrade each ship, to get a feeling of progression," Rob considers. "It also gave a long tail to the game. There had always been a relationship between *WipEout* and F1, so we even toyed with the idea of starting the player out with the choice of low-level teams, where they would have progressed through a career-type mode. That wouldn't necessarily have had a direct relationship with upgrading the ships, but it would have lengthened the whole experience for players." ▶



» [PS2] The wide-open areas of *WipEout Fusion*'s courses were inspired by the podracing in *The Phantom Menace*.



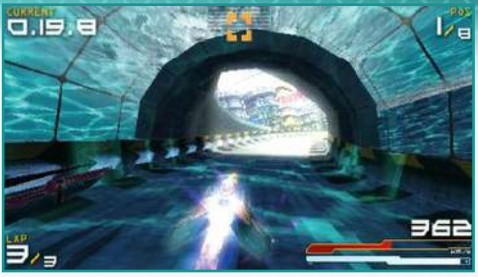
» [PS2] *WipEout Fusion*'s Zone mode challenges you to pilot a ship without brakes that keeps going faster.

Another of *WipEout Fusion*'s new features was Zone, a single-player challenge with a constantly accelerating ship without air-brakes, which had an unlikely inspiration. "I was playing *Tetris*, and thinking how we could express its mechanics in a racing game," Rob reveals. "*Tetris* would start pretty slow and then get faster and faster, and you would have to stay in the zone to beat it. So that was where Zone mode came from, and everything kind of fell into place from there. *Tetris* was also why it had a score. We considered it to be the ultimate show-off for hardcore players who could far surpass whatever we could design – even the Zone mode!"

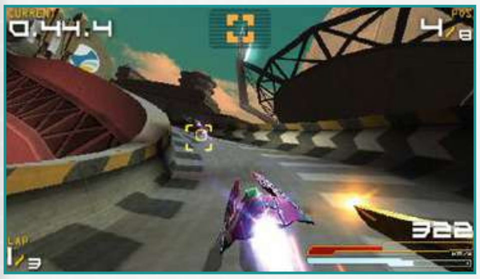
Following positive reviews of *WipEout Fusion*, the series shifted to the PSP with *WipEout Pure*, which ditched its predecessors' pit stops in favour of recharging shields by absorbing weapons, as *Pure* designer Karl Jones notes. "It was just to keep the momentum of the game up, because going into pits broke up the races a little bit," Karl assesses. "We wanted to keep *Pure* a lot more about just racing and keeping up the speed. The ethos was to strip everything back, because *Fusion* had layered a lot of additional things in there. So '*Pure*' was the right name, because it was about losing anything that was extraneous and getting it right down to what *WipEout* was loved for originally, which was high-speed racing."

A couple of *WipEout Pure*'s other design innovations came from an unlikely source, but its barrel roll and side-shift moves worked so well that Karl gladly accepted them. "They actually came from a coder – Martin Linklater," Karl divulges. "He just did a barrel roll one day, and then showed us. He just did it off his own bat and we were like, 'Yeah! That's cool.' He also did the side-shift – with the double-tap of the air-brake. It was brilliant too. It was always good when other disciplines had got a good 'design head'. You just got a much smoother ride if they understood design fundamentals, and then to the extreme – when they brought you cool stuff – it was even better."

> "WE WANTED TO KEEP PURE A LOT MORE ABOUT JUST RACING AND KEEPING UP THE SPEED. THE ETHOS WAS TO STRIP EVERYTHING BACK"
> KARL JONES


» [PSP] Unlike the earlier games, in *WipEout Pure* you can replenish your shields by absorbing weapons.

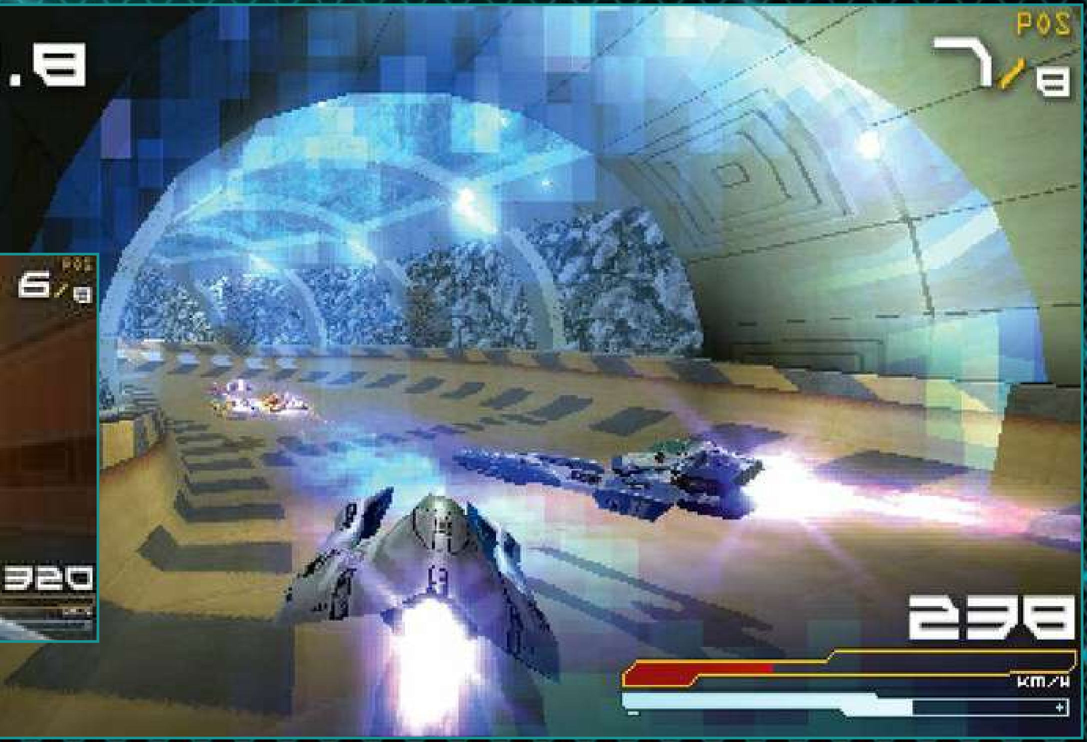
Track design was an equally important aspect of *WipEout Pure*'s development, and more specifically how the placement of its power-ups and weapons could influence players' racing lines. "One of the aspects I remember was the position of the speed pads," Karl muses, "and getting those so you had a trajectory out of a corner where you were hitting them, or forcing players to take a corner tighter, or giving them a choice between a weapon or a speed boost. That took a lot of iteration, because if they were in the wrong place it was really obvious, so there were a lot of tweaks on those."


» [PSP] Double-tapping the air-brakes in *WipEout Pure* 'side-shifts' your ship left or right across the track.

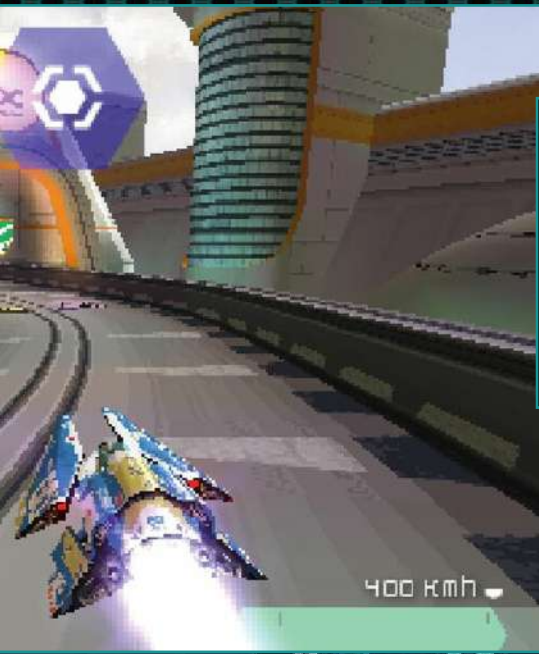
Once PSP gamers got their hands on *WipEout Pure*, its popularity with them led to a follow-up being made for Sony's handheld, which an inspired Karl designed a grid-based challenge mode for. "We thought with hindsight that *Pure* was too linear, so we wanted to give players options, in terms of completing one thing and then getting a couple of options open up," Karl considers. "I was driving when we were trying to work this out, and I saw some chicken wire, and I was like, 'Ah! Shit, man! That's something we could do.' Subsequently it ended up in the game, and with grids you could force players down different paths, and take away harder events at the end of sprigs."

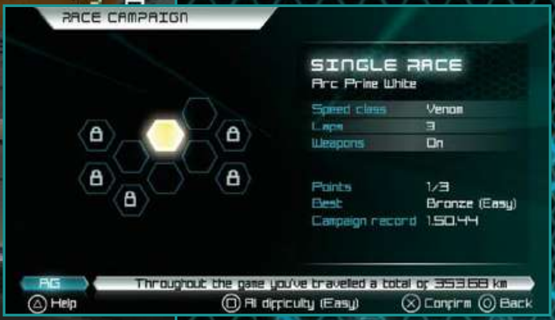
Further efforts to make *WipEout Pulse* more accessible included an option to dial down the difficulty of its events, which would allow players to see more of the game. "Traditionally *WipEout* had always been hardcore – to say the least," Karl concedes. "But I guess with each iteration, certainly from when I was on the series, we would look at ways to make it a little more inclusive, and that was just an obvious thing to do. You know, difficulty levels, and just trying to allow players to progress a little bit more. So I guess with *Pulse* we started to get conscious of how hardcore things were, and started to layer that stuff in."

Another area of *WipEout Pulse*'s design took its lead from the gravity flip pads in one of *WipEout Fusion*'s courses, which flipped ships between ground and ceiling tracks. "Sometimes *Fusion* would suck the ships to the tracks in places, which allowed it to have some really crazy sections, and we wanted to do that!" Karl grins. "So we came up with 'mag strips' that allowed certain track sections to keep the ships on the track. That allowed us to do loop-the-loops, and sections where half the track was mag stripped. So if you went over an edge you would hug the track and fire straight down, otherwise you would launch off on a jump." ▶



» [PSP] The look of the unlockable grid-based challenges in *WipEout Pulse* was based on chicken wire!





RACE CAMPAIGN

SINGLE RACE
Arc Prime White

Speed class	Venom
Laps	3
Weapons	On
Points	1/3
Best	Bronze (Easy)
Campaign record	1:50.44

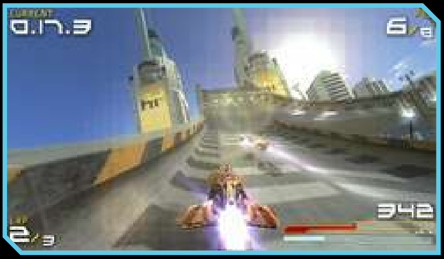
Throughout the game you've travelled a total of 353.68 km

» [PSP] *WipEout Pulse*'s loop-the-loops are made possible by 'mag strips,' which attach the ships to the tracks.

STAGES OF EVOLUTION:

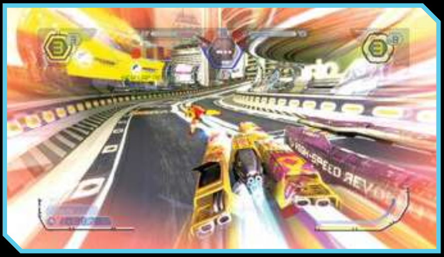
TREACHEROUS TRACKS

THE WIPEOUT COURSES TO WATCH OUT FOR



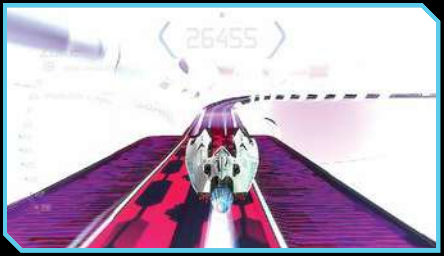
WIPEOUT PURE

Citta Nuova is *WipEout Pure*'s least-forgiving course. It's a string of S-bends and hair-pins with a few straights, but at least these sections are passable at a decent pace. Its pièce de résistance, on the other hand, is a right-angled turn that requires air-braking at a low speed.



WIPEOUT HD

Rather than one or two seriously tough sections, *WipEout HD*'s Metropia track is a series of taxing twists and turns, where air-braking and side-shifting is needed to stay on-course. The exception is a mag-stripped drop, where air-braking makes your ship barrel off the track sides.

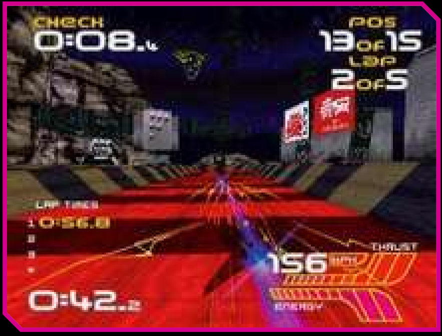


WIPEOUT HD FURY

The series of narrow track sections in *WipEout HD Fury*'s Syncopia course basically count as platforming. They sit in a straight line, and you have to jump off each one to the next. But this becomes trickier each lap, as Syncopia is a Zone track where you speed up and can't slow down.

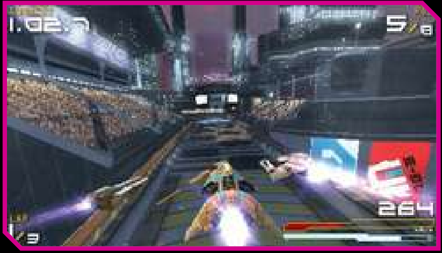
STAGES OF EVOLUTION:
COOL CRAFT

THE PROS AND CONS OF WIPEOUT'S VARIOUS ANTI-GRAV SHIPS



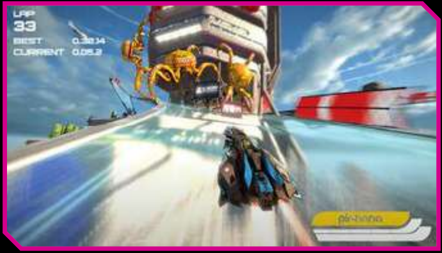
WIPEOUT 2097

Like *WipEout*, *WipEout 2097* has four teams, although each has just one pilot to the original game's two. To make up for this, *2097* has an unlockable fifth team named Piranha. Its prototype ship outdoes its rivals in terms of speed, agility and shields, but it doesn't have any weapons.



WIPEOUT PURE

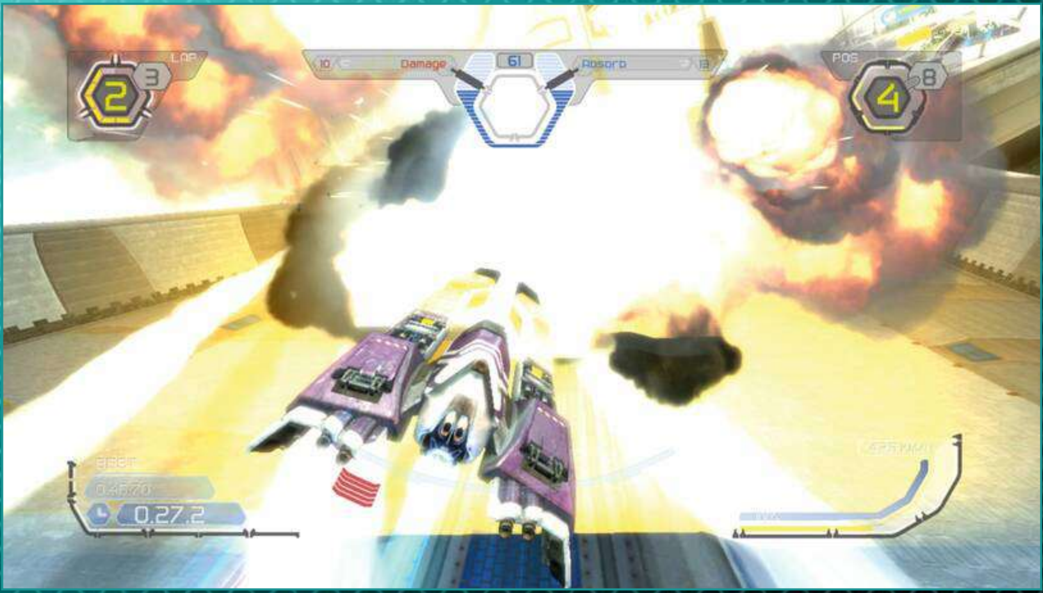
The Harimau ship in *WipEout Pure* has an interesting backstory, in that it has zero emissions and is owned by a humanitarian organisation and not a profit-obsessed corporation. Aside from its poor shields, the Harimau FX300 hits a sweet spot, in so much as it has decent speed and handling.



WIPEOUT 2048

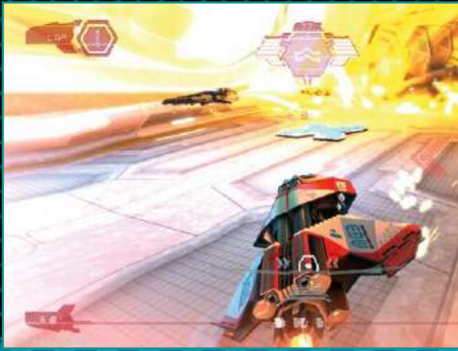
The *WipEout 2048* Pir-hana prototype is tough to unlock, but it's even tougher to fly! It has a chassis that's so slim that there's no room for steering or acceleration controls, and this means that you have to steer using its air-brakes while coping with the craft auto-accelerating.

DSSEGDI DEVELOPMENTS



» [PS3] In *WipEout HD* it's game over when you explode, except in the online modes where you respawn.

> "THE IDEA OF PUTTING WIPEOUT 2048 IN A CITY ENVIRONMENT WAS TO MAKE IT MORE RELATABLE, AND TO MAKE IT MORE OBVIOUS THAT IT WAS A RACING GAME"
> **KARL JONES**



» [PS3] In *WipEout HD Fury*'s Eliminator mode you can turn 180-degrees and target the competitors behind you. Sneaky!

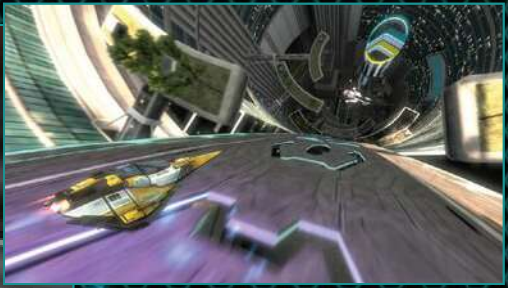
The success of *WipEout Pulse* led to the PS3 title *WipEout HD*, which included tracks from both *Pulse* and *WipEout Pure*, and a new online mode with respawning ships. "Ships blew up a *lot* in the *WipEout* games," Karl qualifies, "so if we had kicked you out after your ship blew up you might have only got one or two ships finishing most online races. So we allowed players to come back in, but they were punished sufficiently with the respawn time. A lot of the time, they had a chance to get back into the game, because other players would crash out as well, or they might fire a Quake forward and find themselves in the front of the pack."

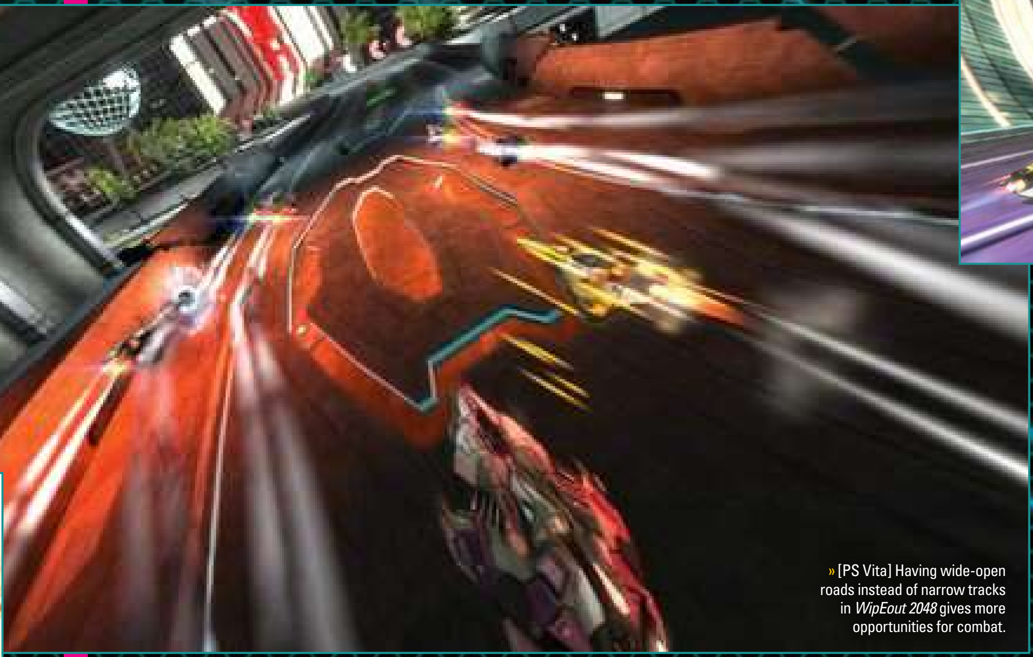
After the launch of *WipEout HD* on the PlayStation Network, an expansion pack *WipEout HD Fury* followed, which set fresh challenges such as a Zone Battle mode, where ships raced to hit targets. "Zone mode was really cool, so it was how could we do an *online* Zone mode?" Karl contemplates. "With hindsight, it got quite complex, and I think it was difficult for people to grasp. But one of the reasons why it fitted was the aggressive nature of *Fury*. So it just evolved from wanting to have some form of Zone mode online, and over time it became what it was, where you were dropping shields and stuff. It was those aspects that I thought were a step too far."

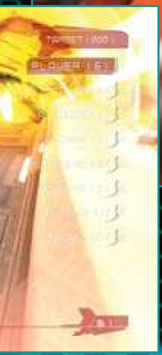
Another interesting test of skill came in the form of *WipEout HD Fury*'s Detonator, where a single ship had to clear explosives by blasting them to pieces. "I seem to remember that the Detonator mode just came from a brainstorming session," Karl ponders. "It was out of a desire to do more with the engine, and to do more with the fundamental idea of having a ship going around a track. When we first started to make it we were hand-placing the mines on the courses, but they ended up being dynamically generated. I think it was a semi successful mode, but not dissimilar to Zone Battles I think it was maybe a little bit forced."

Nevertheless, the feature-rich *HD Fury* was applauded on its release. Its follow-up was a PS Vita launch title and a prequel to the original game, with races on city streets rather than on custom-built tracks. "The idea of putting *WipEout 2048* in a city environment was to make it more relatable, and to make it more obvious that it was a racing game," Karl explains. "So there were traditional buildings and road surfaces with barriers that you might see at an F1 in Monaco. Then whenever the track behaved differently from a road the artists would bring in an augmented section of track that looked like it had been brought in for the race – similar to the way that the streets of Monaco are adjusted to accommodate F1."

Further efforts to increase *WipEout 2048*'s relatability included the inclusion of wide-open roads. These also gave more chances to fire weapons, which were colour-coded to deliver more strategic races. "The wider tracks were to accommodate people who liked traditional


» [PS Vita] *WipEout 2048*'s city setting allows for crazy scenarios such as racing up and down skyscrapers.

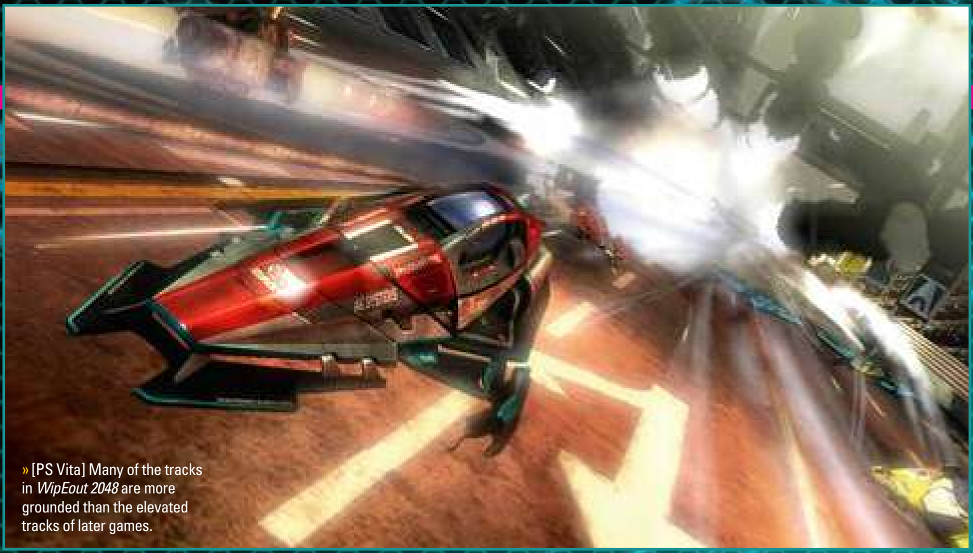

» [PS Vita] Having wide-open roads instead of narrow tracks in *WipEout 2048* gives more opportunities for combat.

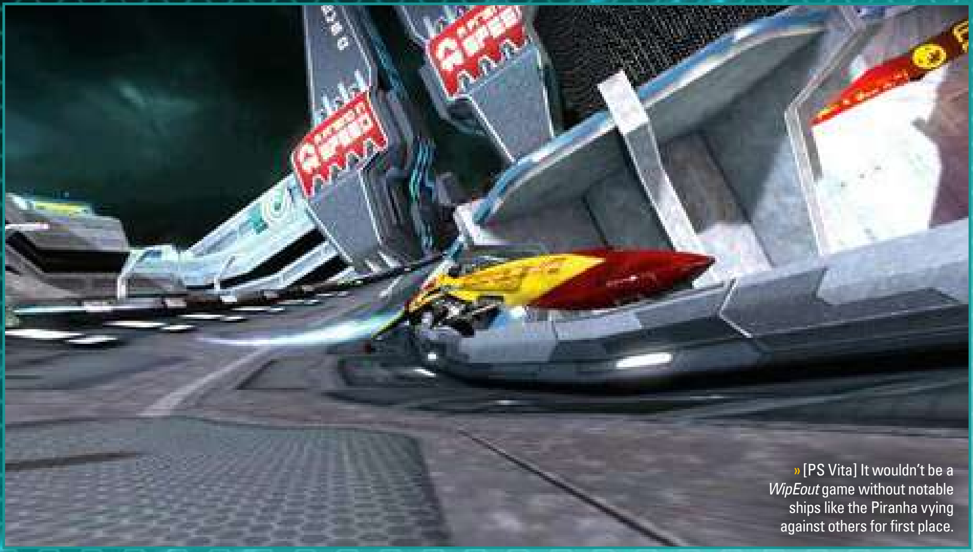


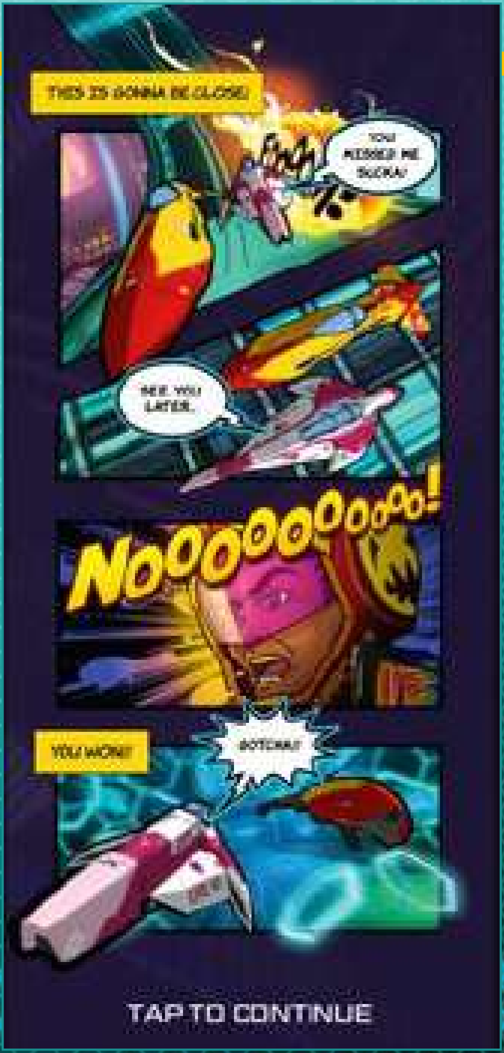
racing games – the fact they allowed for more combat was a side effect," Karl clarifies. "One thing we did in regards to the weapons and power-ups was to split them into defensive, offensive and speed boosts using the colour of the pads. So there was a little more strategy. Another thing was the combat spin, where you spun 180-degrees and fired backwards. We also reduced the air-brakes to one button, so people could use it like a handbrake."

The level designs for *WipEout 2048* were another key consideration, and they benefitted from its urban setting perhaps more than any of the other aspect of the game. "Because a lot of *WipEout* tracks had elevation we had the earlier *2048* tracks lower to the ground, and then we built up," Karl reviews. "It allowed us to do crazy stuff – like going up the side of skyscrapers and back down the other side. We also had shortcuts we called 'skill cuts', where, for example, we could make a split and put speed pads down an alleyway and weapon pads on the other path. Then we finished the game on Altima – a nod to the next game chronologically; the very first *WipEout*."

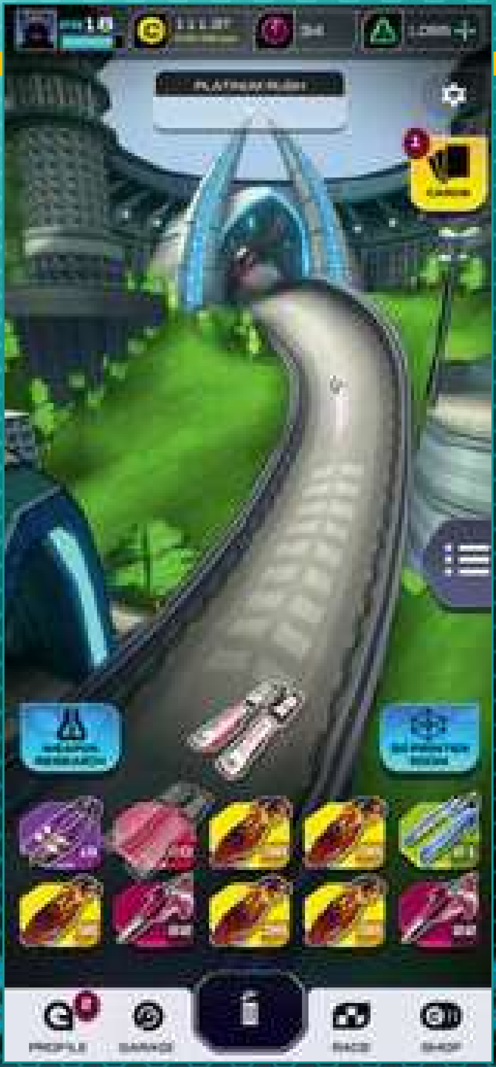
In more recent years the *WipEout* series has been somewhat dormant. 2017 saw the release of *WipEout Omega Collection* on PS4, a compilation which comprised *WipEout HD*, its *Fury* expansion and *WipEout 2048*. Notably, it was the first release in the series to not be coded by Studio Liverpool, which had closed in 2012 – the same year *WipEout 2048* was released. ▶


» [PS Vita] Many of the tracks in *WipEout 2048* are more grounded than the elevated tracks of later games.


» [PS Vita] It wouldn't be a *WipEout* game without notable ships like the Piranha vying against others for first place.


THIS IS GONNA BE CLOSE!
YOU MISSED ME SUCKA!
SEE YOU LATER.
NOOOOOOOOOO!
YOU WON!
GOTCHA!
TAP TO CONTINUE

» [iOS] Nick's proud of the new characters and storylines introduced in *WipEout Rush*. "It's very clever you know – the comic books actually update live in the game based on the ships you select to race with!"

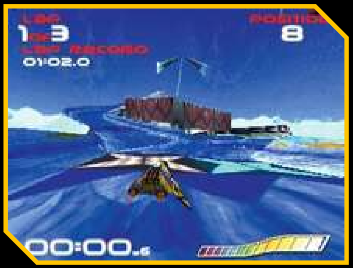

PLATINUM RUSH
PROFILE
GARAGE
RACE
SHOP

» [iOS] It wasn't the *WipEout* that many expected but *WipEout Rush* proved Sony still sees value in the licence.

BEST
0:41.61
0:24.5
380

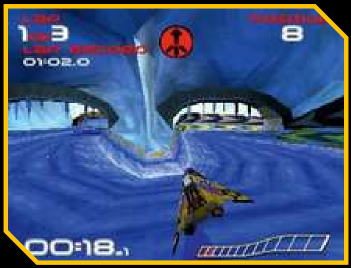
WIPEOUT COURSE GUIDE:

SILVERSTREAM


LAP 1/3
LAP RECORD 01:02.0
POSITION 8
00:00.6

BRANCHING OUT

Just after the opening straight, there's a Y-junction. The left track is trickier but shorter, so take that. After the upward slope steer left with the left air-brake on to make the tight turn, then hit the right air-brake just before the foot of the downward slope to stay on the track.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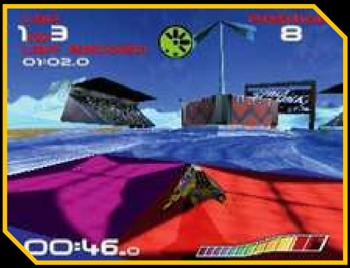
LAP RECORD 01:02.0
POSITION 8
00:18.1

ROUND THE BEND

Silverstream's first cave has a nasty S-bend, although the first turn just requires you to ease off on the accelerator. The second turn is insanely tight, however, so dodge the speed pad just before it and then cut your speed down to a minimum in order to avoid hitting the cave wall.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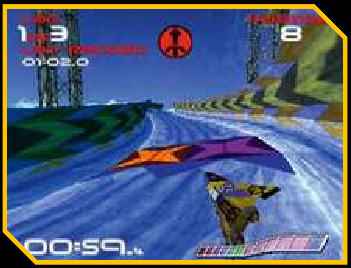
POSITION 8
00:46.0

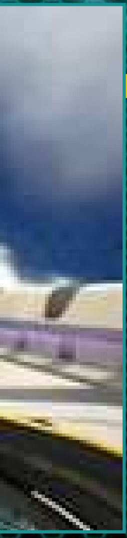
SPLITTING UP

There's not much between the left and right branches of Silverstream's second Y-junction, they're both short paths up and down a hill, but the course's third split is another matter. Be sure to take its left track, as it can save you up to five seconds and move you ahead of rivals.

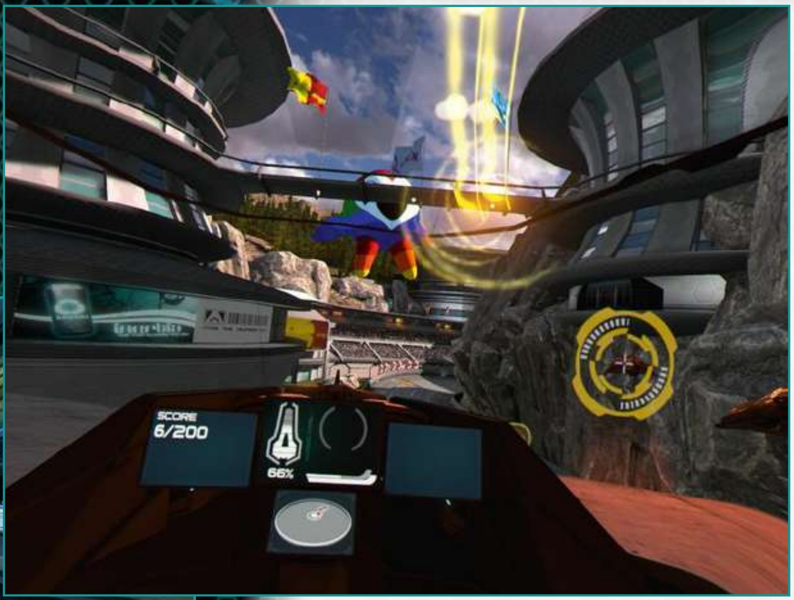

LAP 1/3
LAP RECORD 01:02.0
POSITION 8
00:59.4

CRAZY CORNERING

Although shorter, the left branch of Silverstream's third junction is like a plate of spaghetti! Air-braking is essential, but you'll also need to slow down before certain bends to keep clear of the track sides. Avoid using the speed pads on this section until you've memorised it.



» [PS4] The studios XDev, Clever Beans and Creative Vault Studios all worked on Sony's *WipEout Omega Collection*.



» [PS4] *WipEout Omega Collection*'s VR mode allows you to experience the world of *WipEout* in an exciting new way.

Aside from updated HD visuals and the ability to listen to a 'Best Of *WipEout*' Spotify playlist if you had the PlayStation Music app installed, the biggest upgrade was the ability to play the entire game in VR if you had a PSVR headset. It was a remarkable achievement that put you in the cockpit of your favourite vehicle and immersed you in a way earlier games in the series simply couldn't manage.

Excitement for *WipEout* was later reignited in 2021 with the announcement of *WipEout Rush*, but that enthusiasm was soon dampened when it was revealed to be a card-based management game for mobile phones. Coded by Amuzo Games and published by Rogue, the reception to the game wasn't that much of a surprise to Nick Roberts, Amuzo Games' head of studio. "The *WipEout* community had set their hearts on a new *WipEout* game for PS5, and rumours were flying around about a new game coming soon," he elaborates. "Then we announced *WipEout Rush* for mobile. So I think we got to experience their wrath for a while, with a bit of organised review bombing from a subReddit. It's all calmed down now, with the same people actually enjoying the game after giving it a try."

And trying it was important, because while it didn't play like a traditional *WipEout* game, Amuzo Games had still managed to capture many aspects of the series that have made it so beloved. "The aim with *WipEout Rush* was to create a mobile gaming experience in the *WipEout* universe," continues Nick. "We all just loved the franchise and wanted to bring it to new audiences. Our game had the familiar tracks, ships, teams and weapons of PlayStation *WipEout*, but it was married to idle merge gameplay and simplified racing for a gamer on the go." One of the main reasons for the authenticity that Nick mentions is down to the support the studio had from Sony. There might not have been a main console release since *WipEout 2048*, but Sony still clearly cared about its franchise. "As an ex-PlayStation magazine editor [having access to assets] was the biggest thrill of working with Sony on *WipEout Rush*," admits Nick. "We got to sift through the assets of all the big PlayStation *WipEout* games to create our mobile game. The 3D models of tracks and ships were taken by our art team and given a comic-themed polish up and optimised for mobile. Then for authenticity the voice over and sound effects were used wherever we could fit them in. Our music was brand-new tracks from one of the original musicians too, so it was an authentic *WipEout* experience."

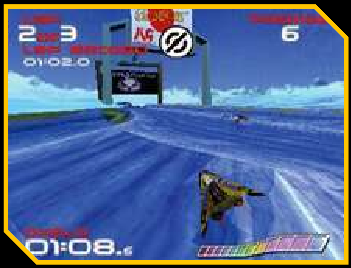
Of course, for anyone that has played the most recent build, you'll have noticed that the racing sections featured in the game aren't actually playable. While this will no doubt upset some, Nick is keen to point out that mobile games do constantly evolve. "The thing about mobile games is they are more a 'games as a service' model where we are constantly making improvements and changes to the game mechanics to create a game that players love and that works from a business point of view," he points out. "*WipEout Rush* has now been renamed *WipEout Merge*, and we are still in soft launch, experimenting with various game setups to give it the best chance. As a free-to-play game, the goal is to attract as many players as possible and keep them playing as long as possible. Playable races is an idea that is on the table, along with many other things."

WipEout Rush might not have been the game that many fans expected, but its latest update is still worth investigating if you're a fan of the *WipEout* games, and its success will hopefully lead to Sony seeing the potential of the series on big consoles again. PSVR2 is just around the corner and we can't think of anything more exciting than experiencing a new *WipEout* game on it. For now, though, we'll just have to wait.

Given that the original *WipEout* made gaming cool overnight, Nicky is modest about her contribution, although she recognises its impact. On the future of the futuristic series, she plays devil's advocate, and leaves her answer open to interpretation. "I look back at *WipEout* with mixed emotions," Nicky reflects. "It's so easy to look at it out of context of the time, but I'm incredibly proud of it and what was achieved by everybody – I played a small part in its creation; really it was down to Jim and Nick. Aesthetically, future *WipEout* titles would be down to what we think the future is going to look like: a dystopian one or perhaps one where nature has completely taken over. So it would depend on what everybody thinks the future holds." *

Pir-hana prototype screenshot courtesy of Lukwtwz, additional *WipEout 2048* shots courtesy of Thomas Cannon.

HOW TO WIN ON WIPEOUT'S CHALLENGING GREENLAND TRACK



INSANE CHICANES

Where the left track of the third Y-junction rejoins its counterpart hit the left air-brake, or you'll hit the track side. The following stretch leads back to the starting line, but it connects at a near right angle, so air-brake right and slow down on approaching the chequered grid.

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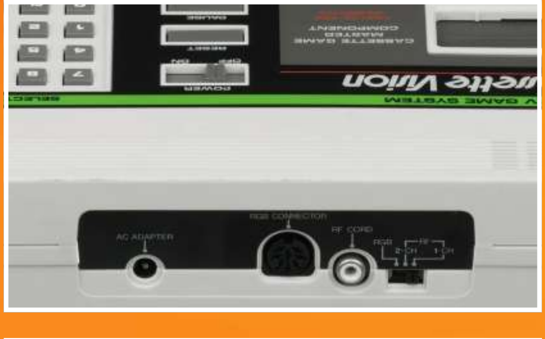
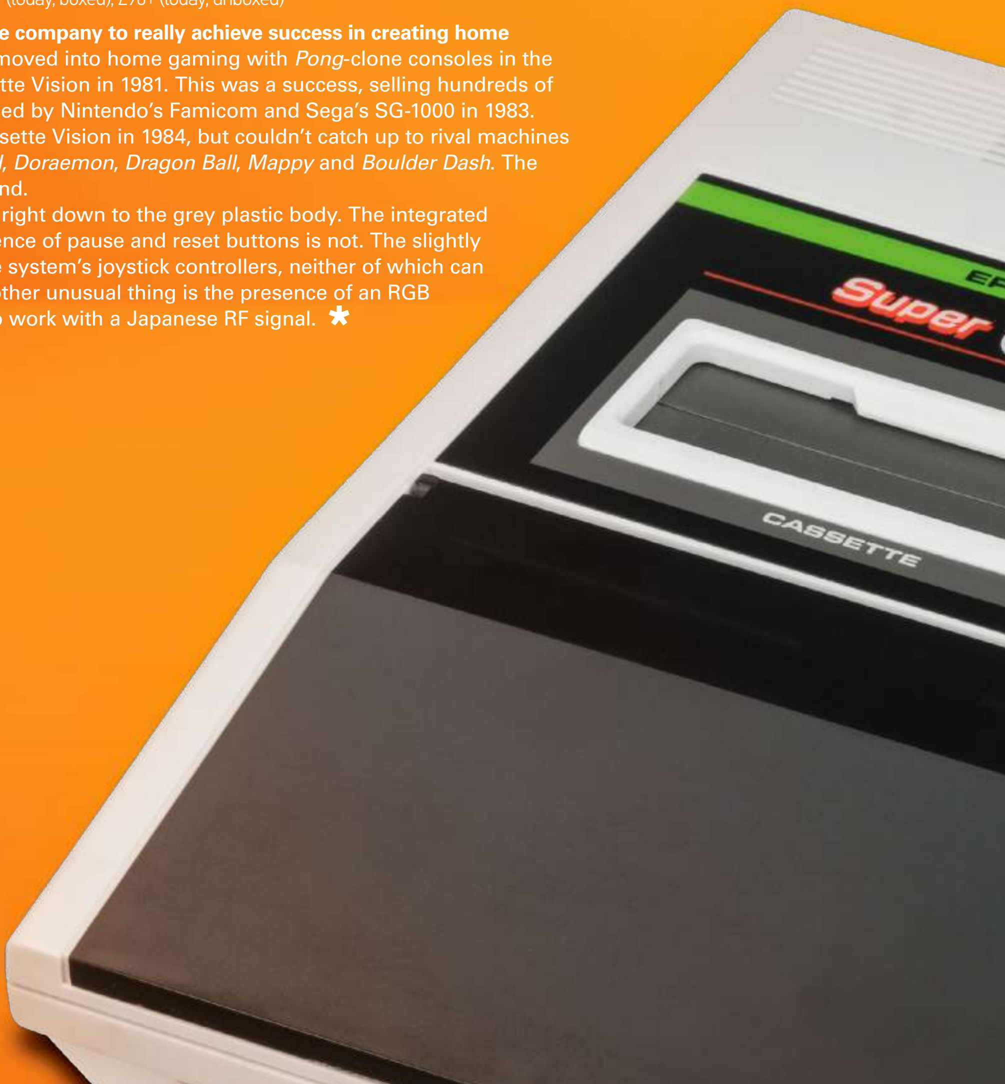
Super Cassette Vision

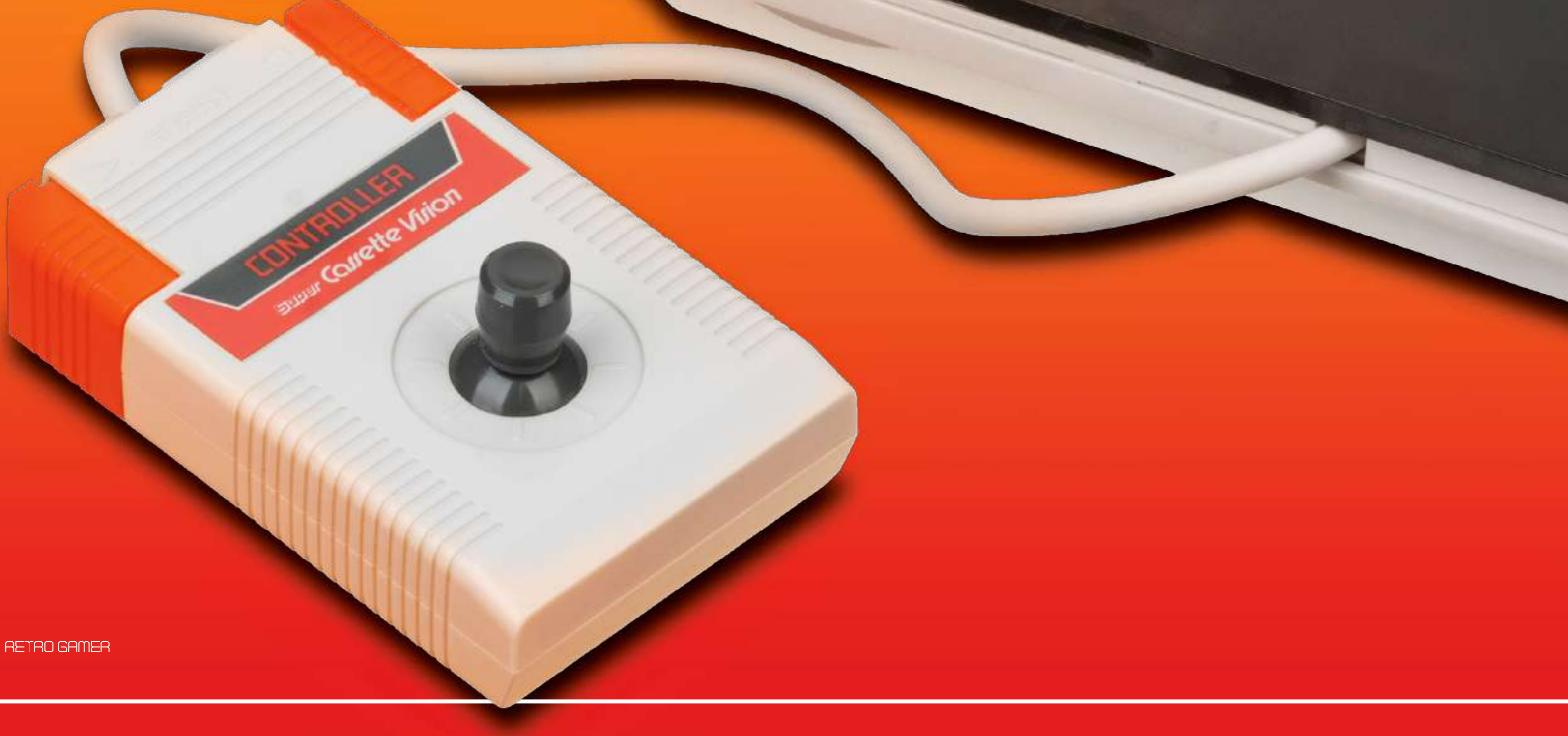
» MANUFACTURER: Epoch **» YEAR:** 1984 **» COST:** ¥14,800 (launch), £120+ (today, boxed), £90+ (today, unboxed)

The toy manufacturer Epoch was the first Japanese company to really achieve success in creating home consoles as we know them today. It had initially moved into home gaming with *Pong*-clone consoles in the mid-Seventies, and introduced the original Cassette Vision in 1981. This was a success, selling hundreds of thousands of units, but it was technically surpassed by Nintendo's Famicom and Sega's SG-1000 in 1983. Epoch returned with the technically improved Super Cassette Vision in 1984, but couldn't catch up to rival machines despite the presence of popular licences such as *Lupin III*, *Doraemon*, *Dragon Ball*, *Mappy* and *Boulder Dash*. The machine was also released in France under the Yeno brand.

The Super Cassette Vision is a typical Eighties design, right down to the grey plastic body. The integrated numerical keypad for selections is unusual, but the presence of pause and reset buttons is not. The slightly translucent black plastic flap covers a storage bay for the system's joystick controllers, neither of which can be detached without taking the whole system apart. Another unusual thing is the presence of an RGB output port, sparing importers the headache of having to work with a Japanese RF signal. *



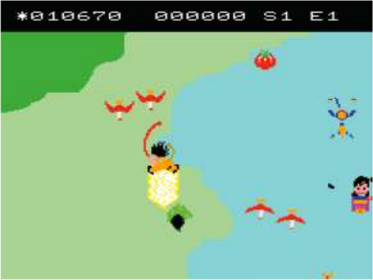




ESSENTIAL GAME

Dragon Ball: Dragon Daihikyou

You might have thought that *Dragon Ball* would make for a great beat-'em-up, but Epoch clearly had other ideas for the popular licence, turning in a shoot-'em-up. You play as Goku, riding the Flying Nimbus – the cloud he uses to get around – trying to find the Dragon Ball hidden at the end of each stage. To do this, you can attack flying enemies with the power pole and hit ground targets with Kamehameha projectiles, all while collecting food and enjoying cameos from the likes of Bulma and Yamcha. It's a simple game, but fans of the franchise won't want to miss it.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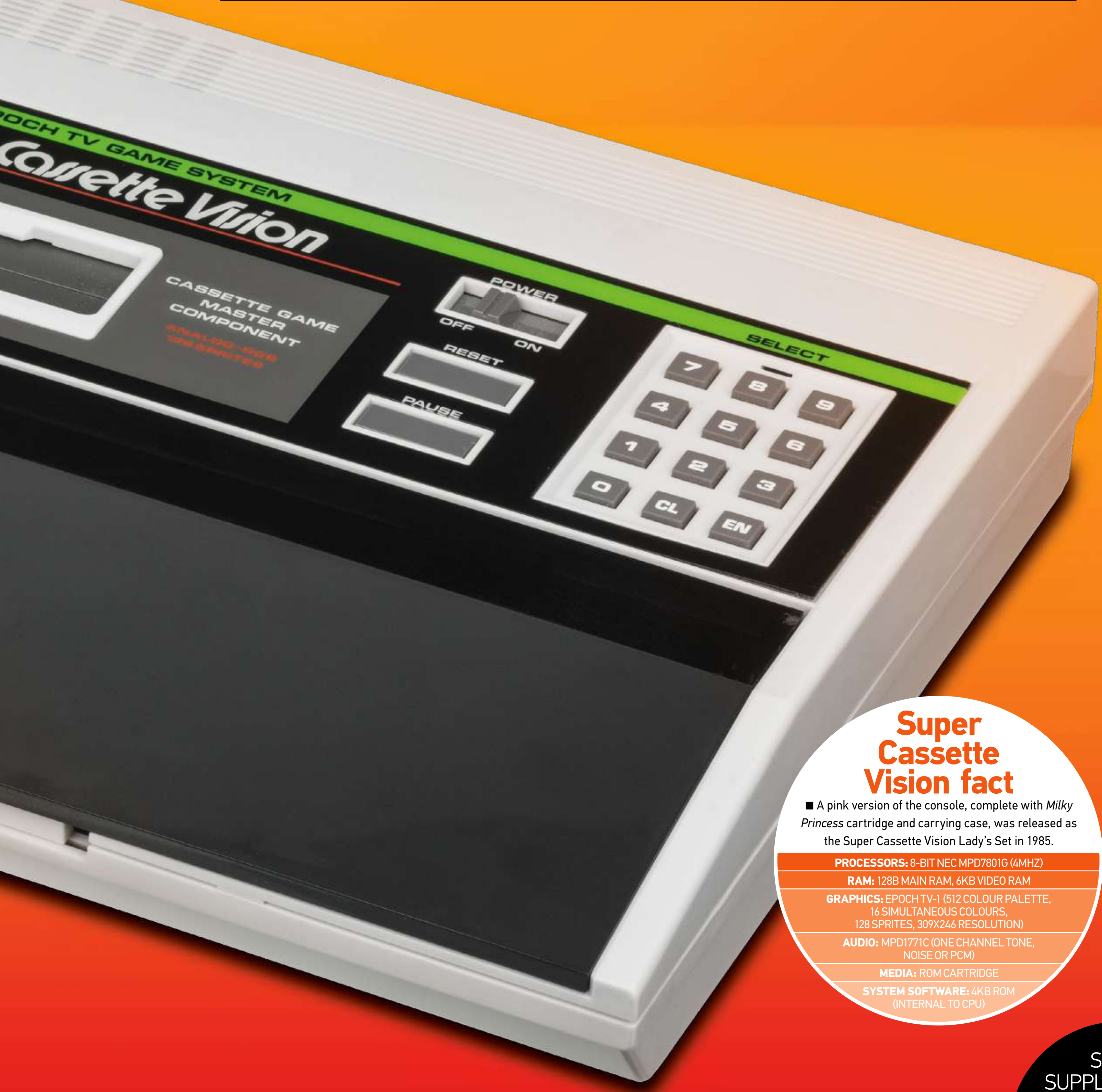

OCH TV GAME SYSTEM
Cassette Vision
CASSETTE GAME MASTER COMPONENT
POWER
OFF
ON
RESET
PAUSE
SELECT
7
8
9
4
5
6
1
2
3
0
CL
EN

Super Cassette Vision fact

- A pink version of the console, complete with *Milky Princess* cartridge and carrying case, was released as the Super Cassette Vision Lady's Set in 1985.

PROCESSORS: 8-BIT NEC MPD7801G (4MHZ)

RAM: 128B MAIN RAM, 6KB VIDEO RAM

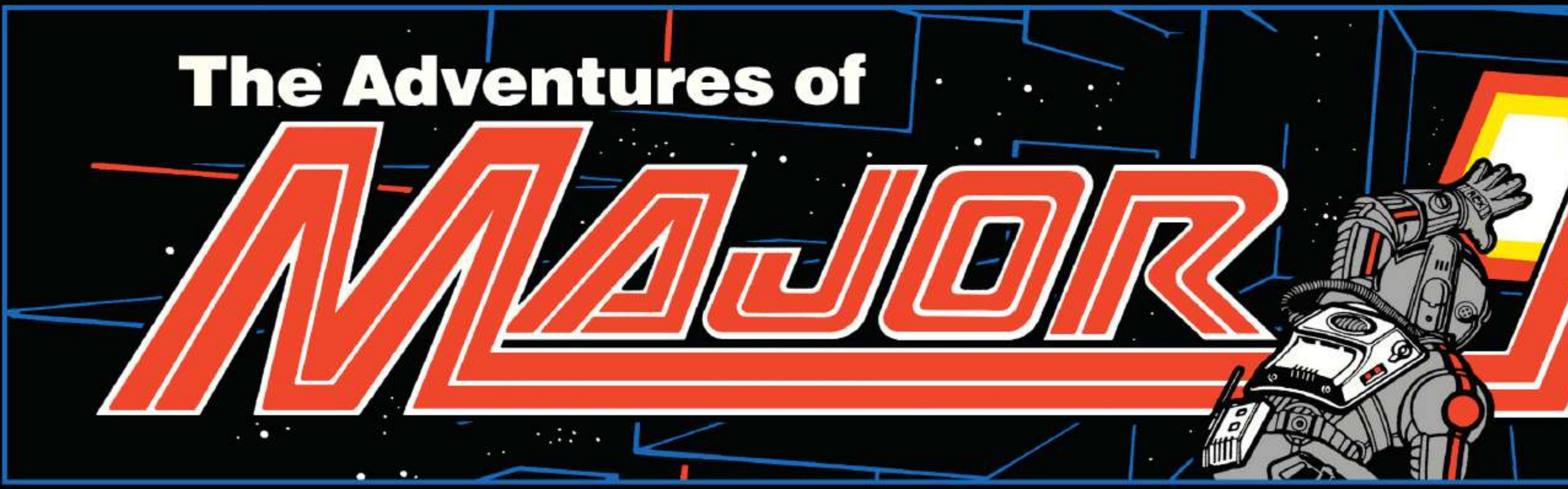
GRAPHICS: EPOCH TV-1 (512 COLOUR PALETTE, 16 SIMULTANEOUS COLOURS, 128 SPRITES, 309X246 RESOLUTION)

AUDIO: MPD1771C (ONE CHANNEL TONE, NOISE OR PCM)

MEDIA: ROM CARTRIDGE

SYSTEM SOFTWARE: 4KB ROM (INTERNAL TO CPU)

SYSTEM
SUPPLIED BY
EVAN AMOS



The Adventures of MAJOR

ATARI'S VECTOR ARCADE GEM MAJOR HAVOC HAS REMAINED INCOMPLETE FOR NEARLY FOUR DECADES. HOWEVER, THE GAME'S CREATOR, OWEN RUBIN, AND A GROUP OF PASSIONATE FANS HAVE JOINED FORCES TO CREATE THE ULTIMATE VERSION OF THE GAME, THE PROMISED END

WORDS BY LD MURPHY

IN THE KNOW

» **PUBLISHER:** N/A

» **DEVELOPER:** OWEN RUBIN, JESS ASKEY, BRYAN ROTH, SCOTT SWAZEY, AND DAVID 'JERKY' JURY

» **RELEASED:** 2022

» **PLATFORM:** ARCADE

» **GENRE:** ACTION

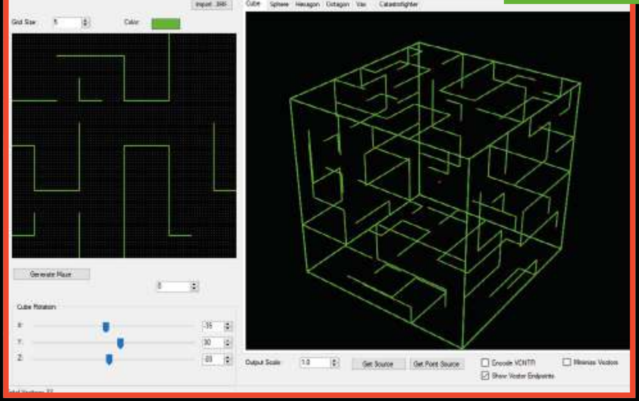
» *The Promised End* is going to be the game that Owen Rubin always wanted it to be.

Although *Major Havoc* is fondly remembered today for being a wildly ambitious game that's utterly stuffed to the brim with content, it didn't start out that way. Inspired by the classic *Star Trek* episode Thollian's Web, *Major Havoc* began as a simple game where players had to guide their spaceship out of a perilous labyrinth of death. The game's creator, Owen Rubin, thought the concept was interesting, but it just wasn't enough and, worse still, it was more of the same. Owen's earlier games, such as *Space Duel* and *Tunnel Hunt*, were fun, but relatively simple affairs. To be fair, most games were at the time, but Owen yearned to create something deeper for a change. "I often found videogames to get boring very quickly," Owen confessed to us, "I'd play [*Defender*] for a while and get bored, same with *Battlezone*. All those games you could play for a long time and you just kept doing the same thing over and over. I liked that games on the home consoles… had a complexity that made them go on and I wanted [to make] a game that was complex."

Owen added more and more features to flesh the game out, but with each new addition his ambitions continued to grow. There didn't seem to be an end in sight either. At a time when Atari typically pumped a game out within six months, *Major Havoc* spent around 18 months in development. Despite constant pressure from Atari's management, the game avoided the chopping block. Owen stated, "[*Major Havoc*] never got cancelled, because it was still progressing and when we [playtested it] people liked it." Still, Owen's luck couldn't last forever and, as it turned out, neither could the game's memory space. *Major Havoc*'s scope finally expanded further than its hardware could handle. To make matters worse, Owen still had a lot of ideas that he hadn't managed to implement yet. The most pressing of all was the missing finale.

Major Havoc's opening text scrawl tasks players with battling their way to the home world of the evil Vaxx empire, Maynard, to free the Major's enslaved people. This wasn't a mere afterthought, Owen saw the game as a story and every tale needs an ending. He envisioned a massive maze world to serve as the game's ultimate climax, but it couldn't be done. There wasn't enough vector memory nor RAM space to account for it. Owen eventually came up with the idea of splitting the Vaxxian home world into four separate mazes played back to back. However, between the programming, animating, design and testing duties – not to mention looming memory constraints – it would have taken another five or six months to pull off.

Unfortunately, time had finally run out too. A slot in Atari's manufacturing schedule opened up and Owen was sent the order, "I was the closest to being finished, so [Atari's management] said, 'Just wrap it up. Stop



Grid Size: 5

Cube Rotation: X: -35, Y: 30, Z: -69

Output Scale: 1.0

☐ Encode VCNTR

☐ Minimize Vectors

☑ Show Vector Endpoints

DEVELOPER HIGHLIGHTS

SKYDIVER
SYSTEM: ARCADE
YEAR: 1978

TUNNEL HUNT
SYSTEM: ARCADE
YEAR: 1982

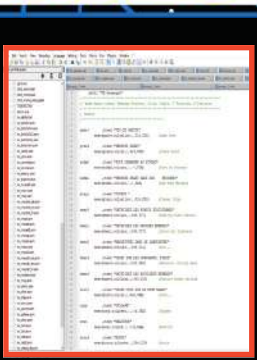
SPACE DUEL (PICTURED)
SYSTEM: ARCADE
YEAR: 1982

» Jess Askey is working with others to finish Atari's classic arcade game.

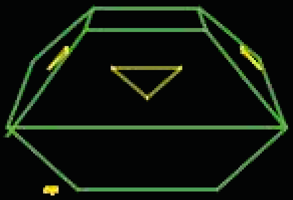
» An early version of the Star Castle. Its complexity caused too much screen flickering so it was scrapped in favour of a simpler design.

HAVOC
THE PROMISED END

"I LIKED THAT GAMES ON THE HOME CONSOLES HAD A COMPLEXITY THAT MADE THEM GO ON AND I WANTED [TO MAKE] A GAME THAT WAS COMPLEX"
OWEN RUBIN

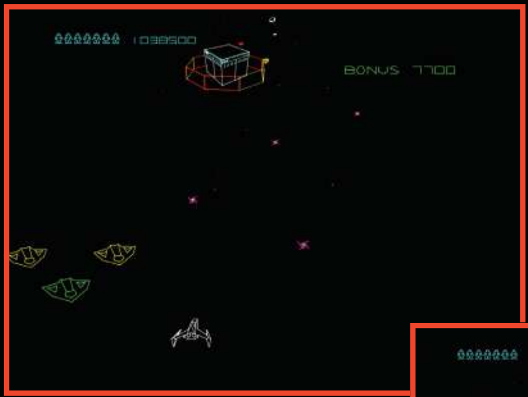


» A peek inside Jess' programming environment for *The Promised End* with some code for the new French edition of the game.

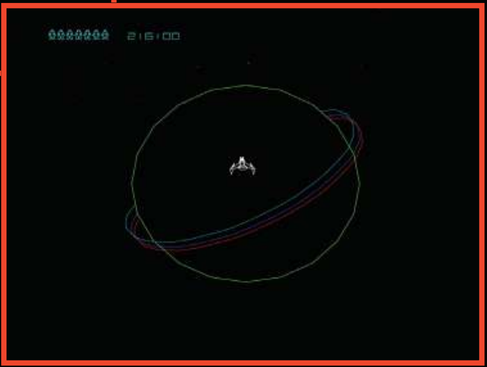


The Adventures of
ATARI
MAJOR HAVOC
THE PROMISED END

» Jon Koople tests a build of *Major Havoc: The Promised End* on his original arcade cabinet.



» [Arcade] The Star Castle battle will put players' skills to the test. They're going to have to earn the right to reach the home world.



» [Arcade] After a long, long journey, Major Havoc finally descends upon the mythical Vaxxian home world, Maynard.

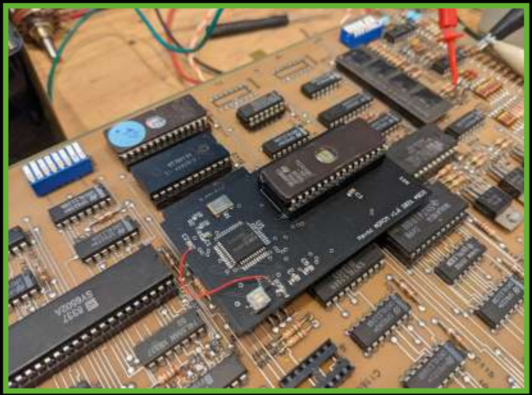
SPEAK TO ME

ADDING NEW SPEECH TO AN OLD GAME

■ As ambitious as Owen was, he never planned to include speech in *Major Havoc* back during the game's development. Mysteriously and completely unknown to Owen however, someone in Atari's hardware department tested adding speech capability to the game. *Major Havoc*'s PCB has integrated circuit locations specifically laid for Texas Instruments' TMS-5220 chip. The chip was the cutting edge of speech emulation software in the early Eighties. Atari used it in a number of its arcade games, such as its smash hit *Star Wars* from 1983. With some work, *Major Havoc* could have joined those hallowed halls.

The team is determined to make that a reality in *The Promised End*. As he decided how to add speech into the game, Owen reflected back on the media that inspired *Major Havoc*. Alluding to the Mother computer in Ridley Scott's *Alien*, Owen imagined a cold feminine voice dispassionately counting down a space station's destruction after its reactor is set off. The team loved the idea, but it hasn't been easy to pull off.

After recording audio samples and figuring out how to program them into the antiquated chip, the results were disappointing to say the least. The TMS-5220 works best at producing deeper voices. The higher the pitch, the more squawky and unintelligible it sounded. That pushed Jess to think outside of the box… or rather, the chip. Peeking inside Atari's *STUN Runner*, which features a smooth feminine narrator, Jess hacked together a way to fit the game's more advanced sound chip onto *Major Havoc*'s PCB via a daughtercard. Now, with a bit of audio trickery, the team can emulate the distinctive sound of the TMS-5220 in the game without suffering from its limitations.



developing, it's good enough.'" Owen's grand plans for an epic conclusion of *Major Havoc*'s tale had to be dropped, there was nothing he could do. Instead, he turned all his attention towards getting the game ready for arcade floors as fast as possible. However, in his mad dash Owen never changed the game's opening story to account for the fact that there wasn't a home world to reach. He also completely forgot about the in-game text in one of the levels which read, "Keep playing, the home world is near."

The mistake haunted Owen throughout his life as he'd constantly be asked by fans and peers alike about the home world. At one point he received a call from Dan Van Elderen at Atari years after he left the company. Dan called to confirm whether the home world really did exist or not as a fan sued Atari after purportedly spending several thousands of dollars attempting to find it. Fortunately for everyone involved, Atari was able to settle the case out of court. Elsewhere, another diehard *Major Havoc* fan saw the cut conclusion as an opportunity for creation rather than litigation.

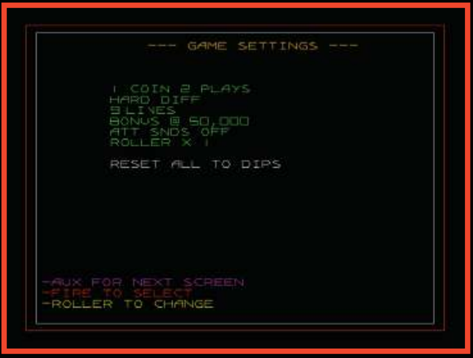
Enter Jess Askey. While visiting the Playland Arcade in State College, Pennsylvania, virtually a second home for the 13-year-old at the time, Jess caught sight of a brand-new arcade game still in its shipping box sitting in the corner. He watched as the arcade operator unboxed the game and set it up. It was called *Major Havoc* and it would change Jess' life. He was instantly enamoured by how much the game had to offer, "[*Major Havoc*] had a little bit of everything in it. It was like a kitchen-sink bagel!" With the help of his friends and watching older kids play the game, he memorised *Major Havoc*'s warp codes to skip to later levels. However, no matter how many quarters he plunked into it, the Vaxxian home world eluded him as he could never beat the game's brutally difficult later stages.

Years passed when Jess, now working as a pinball and arcade machine repairman, got another chance. Playland dropped off its cabinet of *Major Havoc* at his shop for repairs. Jess called over his buddy Bryan Roth and the two spent the next three nights playing the game non-stop in hopes of seeing the ending at last. Alas, even on free-play they couldn't get past the 15th level before Jess had to return the game. They might have been defeated, but they weren't out yet. Jess and Bryan sought out *Major Havoc*'s printed circuit board (PCB), pooled their money together to buy it, and hooked the board up into a *Tempest* cabinet. Eventually with enough practice and patience, the duo managed to blow past the 15th level, but

"I WAS BLOWN AWAY THAT SOMEONE HAD PUT THIS MUCH EFFORT INTO [COMPLETING MAJOR HAVOC] AND I WANTED TO HELP HIM! IF HE WAS THIS INTERESTED, THEN [I'D] MAKE HIM SUCCESSFUL"

OWEN RUBIN

» [Arcade] *The Promised End* includes quality-of-life improvements such as this in-game settings menu. Fiddling with DIP switches will be a thing of the past.



```
--- GAME SETTINGS ---

1 COIN 2 PLAYS
HARD DIFF
3 LIVES
BONUS @ 50,000
ATT SNDS OFF
ROLLER X 1

RESET ALL TO DIPS

-AUX FOR NEXT SCREEN
-FIRE TO SELECT
-ROLLER TO CHANGE
```

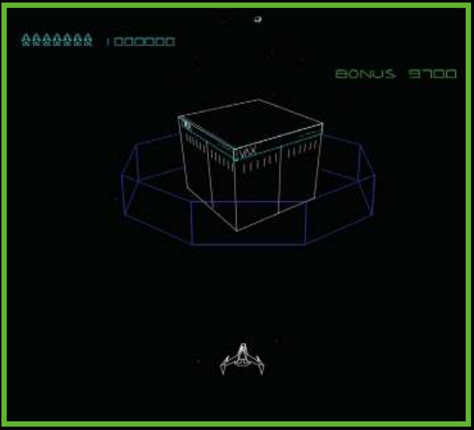
STORM THE STAR CASTLE

BRINGING BACK THE ULTIMATE SPACE WAVE

During the development of *Major Havoc*, Owen designed a particularly tough encounter with a space station dubbed the 'Star Castle'. This was a reference to Cinematronics' *Star Castle* from 1980, one of Owen's favourites. Similar to that game, players had to blast through the space station's shields before they could destroy its defences within. It was a tough fight, perhaps too tough even. When Owen and his co-workers at Atari tested the Star Castle, it took them upwards of three minutes to beat by itself. Owen knew it was too long and Atari agreed, it generally didn't want arcade games lasting longer than 90 seconds per credit. In the end, the Star Castle became yet another casualty on the cutting floor.

When it came time to decide what to add to *The Promised End*, the Star Castle was on the top of Owen's list. Unfortunately, the code for it is long lost. This forced Jess to recreate it from scratch, which has brought on a number of challenges. The first major hurdle came from something seemingly as banal as the Star Castle's shape. Jess explained why he had to redesign the Star Castle to be eight-sided rather than Owen's original six-sided creation, "[It's] easier to code in powers of two. [Six-sides were] killing me, because it was hard to write to work as it really started to slow down the game whenever there were all these enemy ships running around you, this Star Castle moving around shooting fireballs and all that jazz."

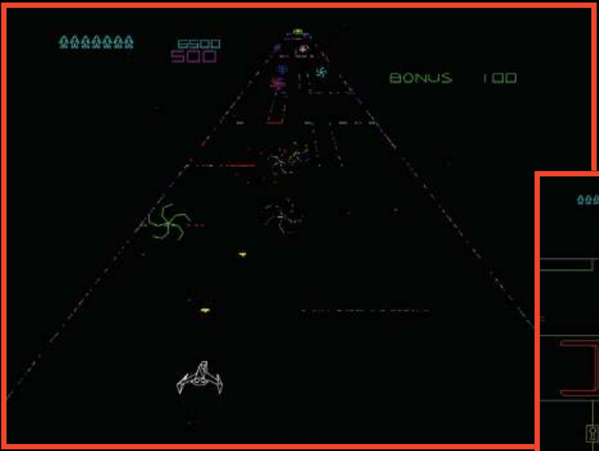
Since then, the Star Castle has been upgraded into *The Promised End*'s final boss that stands between players and the long-awaited Vaxxian home world.



there was a problem. Instead of sending them to the Vaxxian home world, the game began repeating levels.

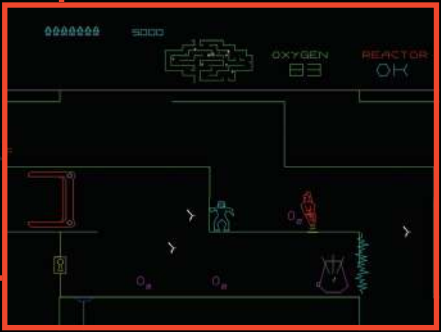
They were in too deep to back out now so Jess devised a different approach. He recalled, "That's when I learned how to disassemble ROM images. So, I disassembled [*Major Havoc*'s] ROM and printed it out in binary. I figured out where the number was in the binary code for the number of lives and I changed it so that you got 120 lives." With this cheat, Jess and Byran managed to reach as far as the 88th level, but the game continued repeating endlessly. The search was put on hold again before the pair could try anything else. They had bigger things on their plates as they parted ways to go to college.

Nevertheless, that message, "Keep playing, the home world is near," kept haunting Jess over the years. He eventually decided to start learning how to program on his nights after work. Jess figured there was no better way to achieve this than reverse engineering *Major Havoc*, "That's the way I do a lot of things in life, I learn through a goal. And my goal was obviously to find the home world. It was sort of a puzzle that kept [creating] more questions. As an inquisitive person and sort of a slave to curiosity, [*Major Havoc* became] a bottomless pit of questions to try to answer – culminating in how does this whole thing work?"



» [Arcade] It's hard to believe that at one point these labyrinth waves were all that *Major Havoc* had to offer.

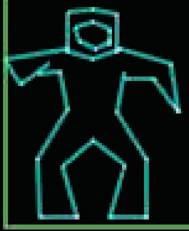
» [Arcade] The Max robot enemies were cut from the original game, but in *The Promised End* they'll ruthlessly track down players throughout mazes once activated.

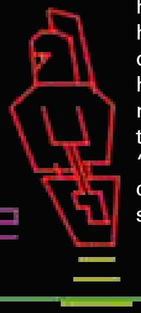


After digging through the code enough, Jess finally confirmed that there was no home world in *Major Havoc* after all. While it was disappointing, that's when a new idea struck him: he'd make his own home world. He fantasised working at Atari creating arcade games in his youth, but it was the Nineties by now and the Atari he knew (as well as the entire arcade industry for that matter) had changed. Creating the long-awaited ending to *Major Havoc*, a game that meant so much to him over the years, was the next best thing. Moreover, Jess believed that he had learned the game well enough that it wouldn't be too hard to make a couple more levels.

The project was dubbed *Major Havoc: Return To Vaxx*. Jess created a few levels by editing the game's binary code in a hex editor and re-burning the ROMS. It quickly became clear that he bit off more than he could chew, though. "It just got too complicated to do anything else," Jess said, "I [wanted to] make the home world, but that just wasn't going to work that way of doing it. It was way too complex to do something that large of an endeavour." For instance, a long process kicked off each time Jess found something wasn't quite working as he intended in a level. He'd have to erase the EPROM, go back into the code to make the change, burn the EPROM again, and put it back into the game. This took around 20 minutes per change. It was a gruelling process that drained his enthusiasm.

Jess vented his frustrations on the Reg. Games.Video.Arcade.Collecting (RGVAC) Usenet newsgroup, a hotspot for retro gamers back in the early days of the Internet, when a member by the name of Al Kossow reached out to him. As luck would have it, Al knew Owen and offered to get the two in touch to help Jess complete *Return To Vaxx*. Owen recalled how impressed he was with Jess' dedication, "I was blown away that someone had put this much effort into [completing *Major Havoc*] and I wanted to help him! If he was this interested, then [I'd] make him successful." Owen dug out a copy of *Major Havoc*'s source code from his garage and helped Jess gradually recreate it. It was a gargantuan task that took years, but to Jess it was worth it, "Instead of me just hacking numbers, I could write code, make loops, change the structure of things and recompile it to





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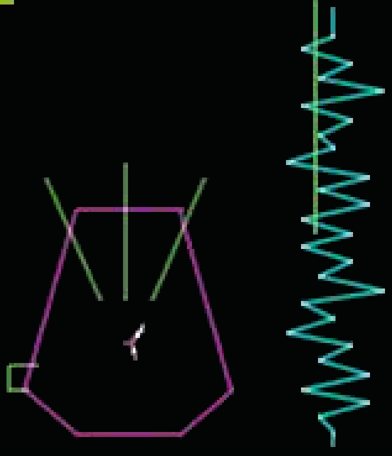
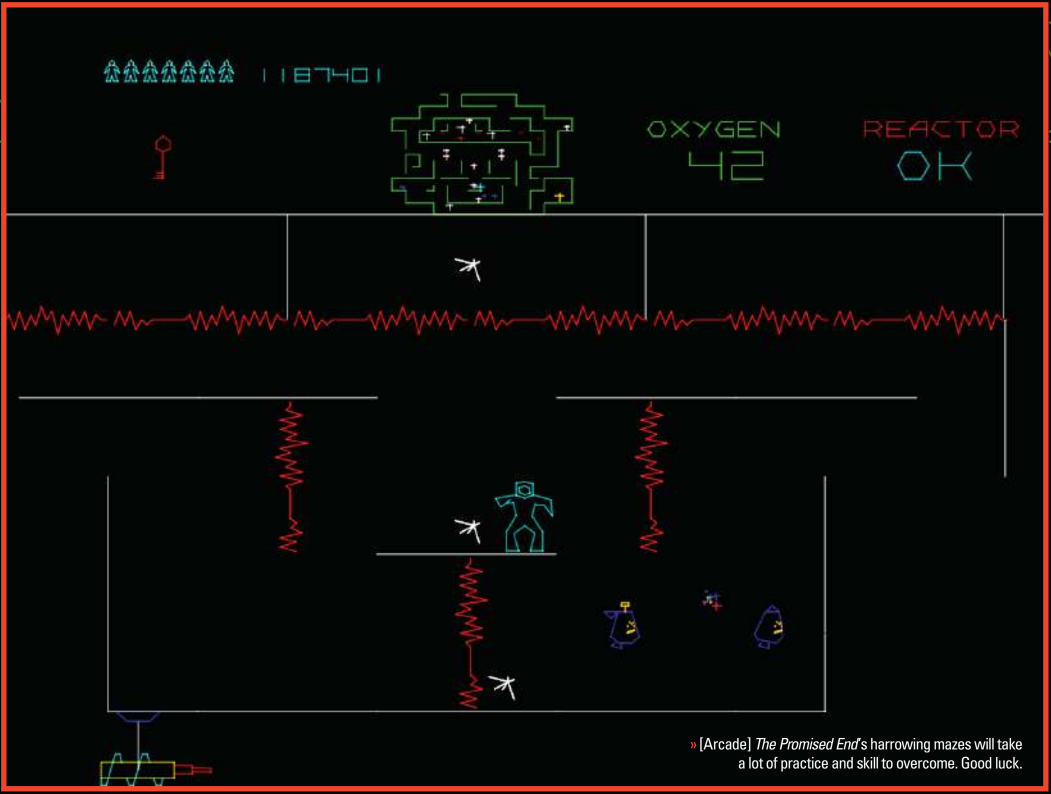
ALPHA TESSERACT ENGAGED!





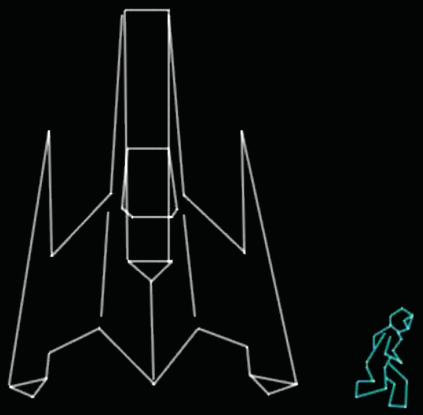
» [Arcade] *The Promised End*'s harrowing mazes will take a lot of practice and skill to overcome. Good luck.

OXYGEN
46
REACTOR
OK

» [Arcade] Cruel traps await unsuspecting gamers. Stay on your toes if you want to beat *The Promised End*.

OXYGEN
0
REACTOR
OK

» [Arcade] Keep finding more oxygen pick-ups and don't lose track of time within the mazes. Suffocation can sneak up quickly on slow or careless players.



21700
OXYGEN
7
REACTOR
OK

make ROMs." Additionally, Jess was able to optimise the code, freeing up valuable memory space which greatly expanded the potential of what else could be added to the game.

With this breakthrough, Jess turned his work towards creating the *Major Havoc* level editor. This graphical development interface allowed him to build mazes, place enemies, set up their movement parameters, and more – all directly (and visually) within the program. Afterwards, he'd load his work from the level editor into the source code and compile it directly into the game. Jess was ecstatic, "That took six weeks to do [while I was working on] *Return To Vaxx*. Now, with the level editor and the way I created my source code, I could make a level in an hour."

The year was 2002 and at last creating the Vaxxian home world didn't seem so impossible anymore. Jess reached out to Owen and pitched the idea of working together to finish *Major Havoc* once and for all. Owen was all for it, but just as things seemed primed to take off, life got in the way. Jess just started a family with the arrival of his first child and Owen was busily working in the exploding tech start-up scene. As passionate as they were, the fact of the matter was that they didn't have the time anymore so the idea was shelved.

Then in 2016, another member of the RGVAC community came to the project's rescue. Scott Swayze was working alongside Luke Dyson on creating reproduction boards capable of playing *Major Havoc* as well as other vector games. Scott was familiar with *Return To Vaxx* and emailed Jess and Owen if they ever planned to finish the project. If so, Scott wanted to design the boards to be compatible with *Return To Vaxx* before they released it. This turned out to be the catalyst the project needed to finally kick into gear. Owen, Jess, Scott and Luke spent the next three months discussing in detail what they needed to finish *Return To Vaxx*. Jess realised that this was their best and potentially last shot at concluding this decades-long journey. He told Owen, "We've talked about this for many years now – let's do it. If we don't do it now, it's not going to happen."

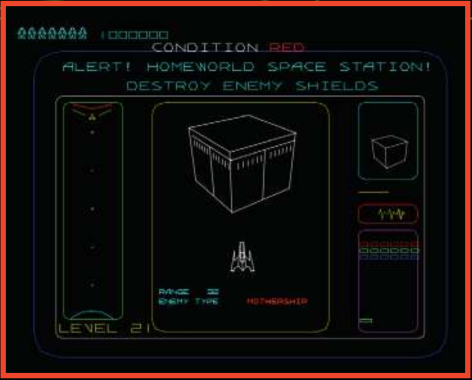
However, if they were going to do this, Jess wanted to go all out to truly make it worth the time and effort. Not only would they create the long-awaited Vaxxian home world, but with Owen's direction they'd restore other cut content like the Star Castle wave. Furthermore, they'd create even more new levels, add speech compatibility, make quality-

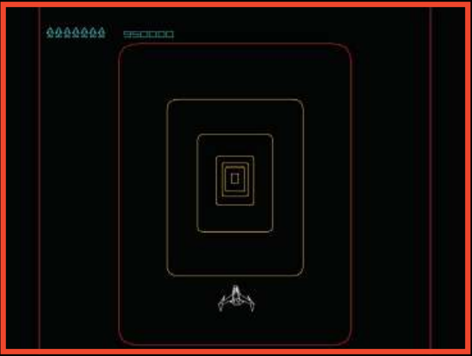
> **"WE'VE TALKED ABOUT THIS FOR MANY YEARS NOW – LET'S DO IT. IF WE DON'T DO IT NOW, IT'S NOT GOING TO HAPPEN"**
>
> **JESS ASKEY**

of-life improvements, and much more. They were going to release the ultimate version of *Major Havoc* that fans could enjoy for years to come. As such, *Major Havoc: Return To Vaxx* didn't fit the scope of the project anymore. Courtesy of Luke, it was rechristened *Major Havoc: The Promised End*.

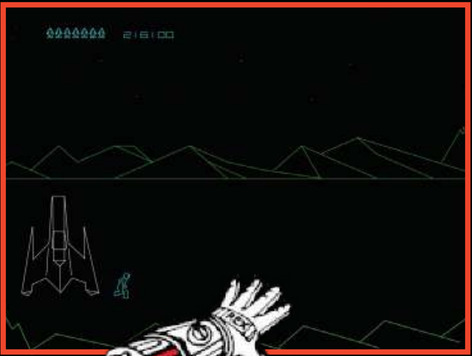
Since then, Jess has been slowly, but surely designing and coding *The Promised End* in his free time. Meanwhile, Owen guides him on bringing cut content back to life and also offers advice on fitting new features into the game. The team has grown beyond just Owen and Jess though. For example, Bryan, who aided Jess on his mad search in their teenage years, has come back into the fold to help further improve and expand the *Major Havoc* level editor. Jon Koople ensures that anything Jess adds to the game works just as well on real hardware as it does in MAME. Scott continues to assist the project however he can too. He played a key role in bringing David 'Jerky' Jury onto *The Promised End*'s team. Jerky has painstakingly created numerous new levels for the game as the project's lead level designer and also serves as the lead playtester too. Whenever Jess codes in a new addition to the game he creates a special ROM that warps directly to that level. Jerky takes the ROM, boots it up into MAME, tests it and gives Jess feedback. Jess tweaks it and sends it back to be tested again. This process continues until the feature is just right.

Thanks to all this hard work, the ultimate version of Atari's vector cult-classic is almost at hand. The team plans to unleash *Major Havoc: The Promised End* at this year's California Extreme, a convention in the South San Francisco Bay Area (not far from Atari's old stomping grounds) that celebrates the world of arcade gaming. Coming just shy of 40 years after *Major Havoc*'s original release, the team is busily planning out a celebration that will be worth the wait. Afterwards the game will be released for free via the project's website at mhedit.askey.org Get those clones ready, fire up the Catastrofighter, and buckle in… the home world is near. ✱

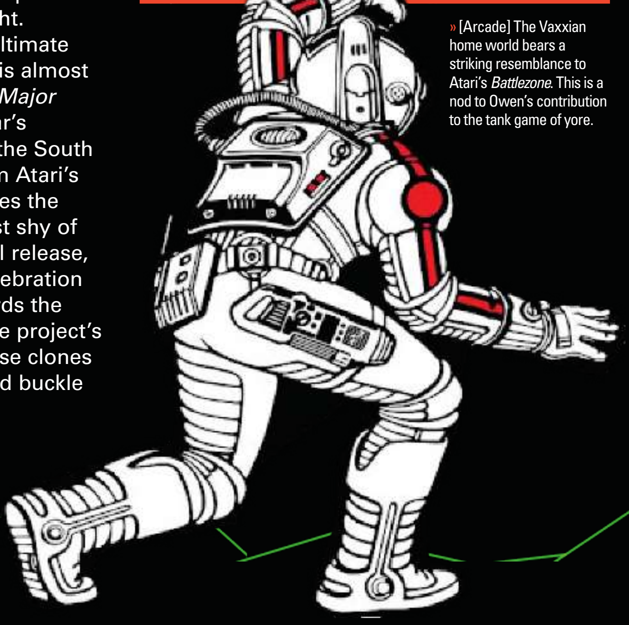


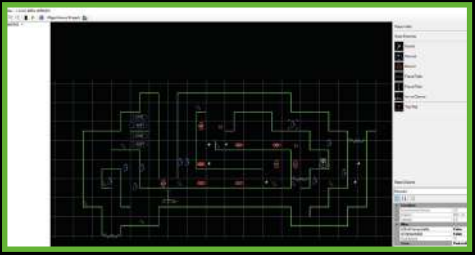


» [Arcade] *The Promised End* includes brand-new warps. They'll either take you further on your journey to the home world or to secret detours.



» [Arcade] The Vaxxian home world bears a striking resemblance to Atari's *Battlezone*. This is a nod to Owen's contribution to the tank game of yore.



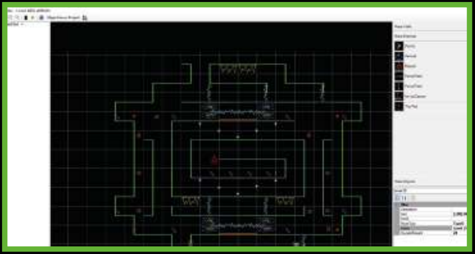


MAZE MASTER

ENJOY THEIR MAZES OR MAKE YOUR OWN

■ The level editor first started as a basic tool that allowed Jess to visualise the binary data that made up each level of *Major Havoc*. Over the years, Jess evolved it into a full-blown development program – largely coded in hotel rooms or high up in the sky as he travelled for work. While he got to a somewhat functional state, it was far from perfect. Jess then hatched a scheme to rope his friend Bryan in to help truly fine tune it, "[Bryan] wanted to make a *Tempest* level editor. [I told him,] 'You should take my *Major Havoc* level editor and make it also do *Tempest*. By the way, it's really broken. Do you want to fix it?'" While Bryan still hasn't gotten around to modifying the level editor for *Tempest* yet, he has taken Jess' work and improved it ten-fold.

Thanks to Bryan, the level editor allows users to build out mazes within the program and playtest them in MAME with the click of a button. Users will also be able to edit every single level within *The Promised End*, both new and old, potentially making their own version of the game. The truly ambitious can even create custom *Major Havoc* ROM hacks consisting of entirely new levels using the program. The final build isn't out yet, but a prerelease version can be freely downloaded on *The Promised End*'s website right now. The team also plans to release the level editor's source code as well, allowing future *Major Havoc* fanatics and retro game designers to easily utilise decades of work in their own projects.



» One of the new secret levels hidden within *The Promised End*. Finding them will be half the battle, beating them is the real challenge.

Rescue Mission

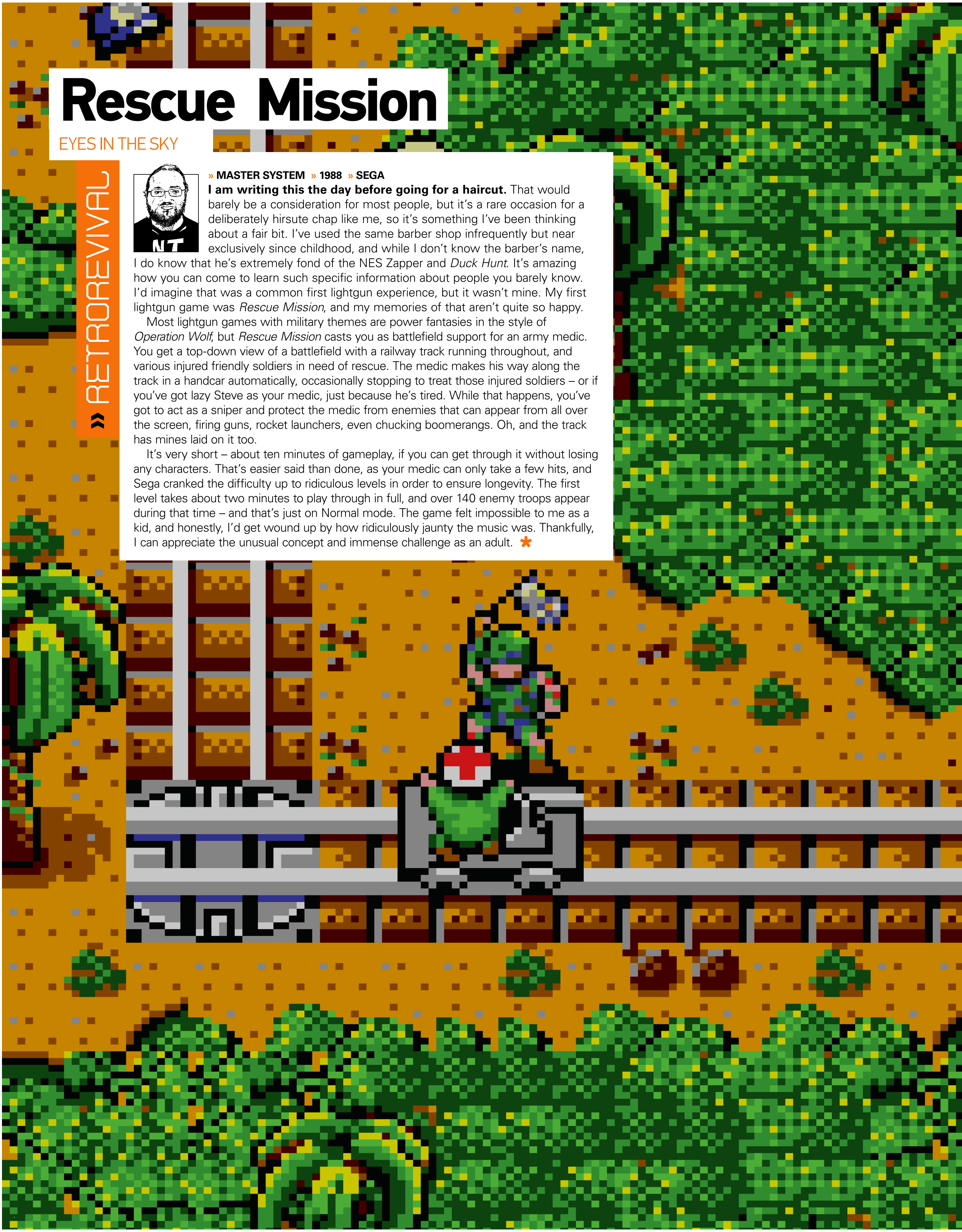
EYES IN THE SKY

» MASTER SYSTEM » 1988 » SEGA

I am writing this the day before going for a haircut. That would barely be a consideration for most people, but it's a rare occasion for a deliberately hirsute chap like me, so it's something I've been thinking about a fair bit. I've used the same barber shop infrequently but near exclusively since childhood, and while I don't know the barber's name, I do know that he's extremely fond of the NES Zapper and *Duck Hunt*. It's amazing how you can come to learn such specific information about people you barely know. I'd imagine that was a common first lightgun experience, but it wasn't mine. My first lightgun game was *Rescue Mission*, and my memories of that aren't quite so happy.

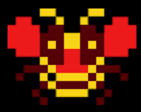
Most lightgun games with military themes are power fantasies in the style of *Operation Wolf*, but *Rescue Mission* casts you as battlefield support for an army medic. You get a top-down view of a battlefield with a railway track running throughout, and various injured friendly soldiers in need of rescue. The medic makes his way along the track in a handcar automatically, occasionally stopping to treat those injured soldiers – or if you've got lazy Steve as your medic, just because he's tired. While that happens, you've got to act as a sniper and protect the medic from enemies that can appear from all over the screen, firing guns, rocket launchers, even chucking boomerangs. Oh, and the track has mines laid on it too.

It's very short – about ten minutes of gameplay, if you can get through it without losing any characters. That's easier said than done, as your medic can only take a few hits, and Sega cranked the difficulty up to ridiculous levels in order to ensure longevity. The first level takes about two minutes to play through in full, and over 140 enemy troops appear during that time – and that's just on Normal mode. The game felt impossible to me as a kid, and honestly, I'd get wound up by how ridiculously jaunty the music was. Thankfully, I can appreciate the unusual concept and immense challenge as an adult. *

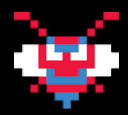


ULTIMATE GUIDE

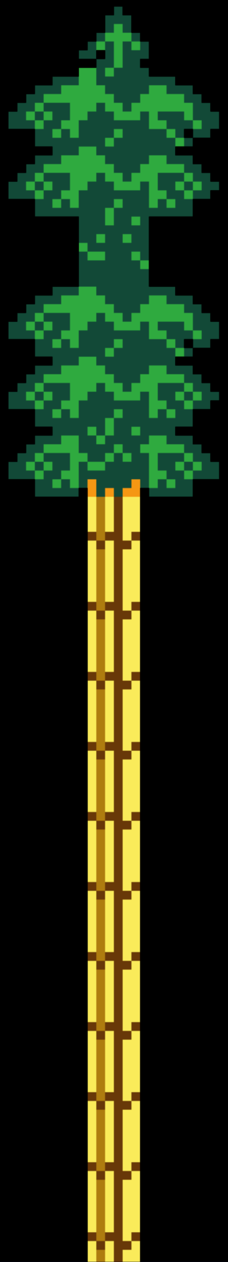
DONKEY KONG 3



NINTENDO HAS CREATED MANY MEMORABLE VIDEOGAME HEROES: MARIO, LUIGI, LINK… STANLEY THE BUGMAN? JOIN US AS WE DISCOVER HOW THE POOR PEST CONTROLLER OUSTED MARIO FROM THE THIRD DONKEY KONG ARCADE GAME – AND NEVER WORKED IN THIS TOWN AGAIN



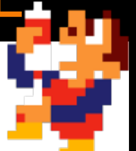
WORDS BY MARTYN CARROLL



To say that *Donkey Kong 3* deviated from the first two games would be an understatement of gorilla-sized proportions. The platforming antics were out, replaced by an unsubtle shooter where newcomer Stanley has to blast waves of insects and repel Donkey Kong (who's randomly descending the screen on vines, because DK does what he wants basically). Some have labelled it the 'unkong' game, on account of it intentionally disrupting a winning formula, and not necessarily for the better.

Second-guessing designer Shigeru Miyamoto is a foolish endeavour, but let's consider that *Donkey Kong 3* was primarily sold as a conversion kit for existing Nintendo cabs. If an arcade operator was looking to refresh a tired *Donkey Kong* machine would they want another platformer? And if they did, Miyamoto had that covered with another kit, a little something called *Mario Bros*. The tactic seemed to work. When the game debuted at the AMOA (Amusement & Music Operators Association) trade show in New Orleans in October 1983, Gene Lewin of the *Play Meter* industry mag recommended it as a "good investment" for arcade operators. "When converted, *Donkey Kong 3* looks just like a brand-new game," he wrote. "So much for the idea that conversions mean inferior games." He did have one reservation though. "It has three scenes, but they are not as different from each other as they were in the earlier *Donkey Kong* games."

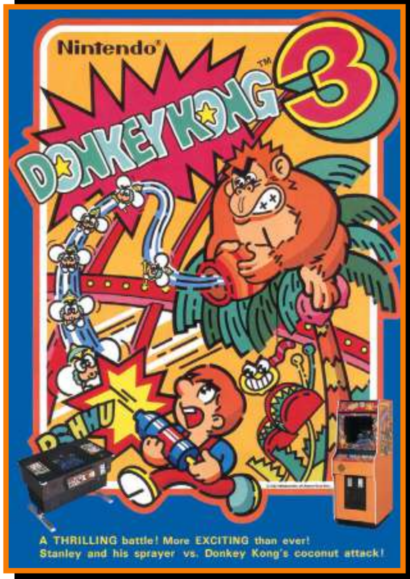
This was a valid point. The first two games each had four scenes, and while they weren't given official names by Nintendo, they featured enough unique elements to earn affectionate nicknames from fans – pie factory, rivet stage, springboard stage etc. In the third game the scenes are so similar that the key distinguishing feature is the colour of the platform at the bottom of the screen, hence they're commonly known as blue, grey and gold. There's no unfolding plot this time around either. Previously Mario was rescuing Pauline and Junior was saving his 'papa', whereas now you're simply instructed to 'spray Donkey Kong to the top'. This requires a little context. It seems that DK is looking to return to nature and has taken up residence inside Stanley's greenhouse. Armed with your spray gun, you complete each round by either blasting DK to the top of the screen or destroying all of the insects which DK sends swarming down on you.

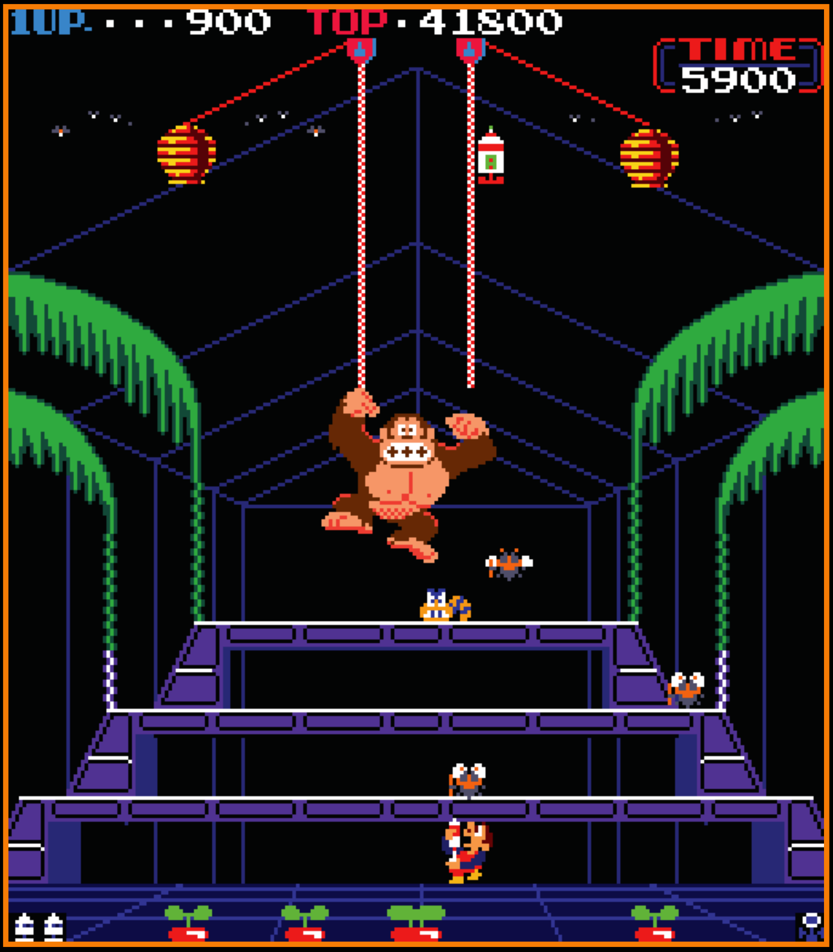


Although it seems simple there are various rules which make it more challenging. If you let the most common insects (Buzzbees) steal one of your precious flowers, they get high on nectar and dive bomb you. Some enemies (Creepies) cannot be killed under normal conditions, while others (Beespys) take two shots to destroy then go out with a bang, showering you with deadly insect bits. As you loop through the three scenes, the enemies become faster, new insects join the party, and DK becomes even more determined to stomp you.

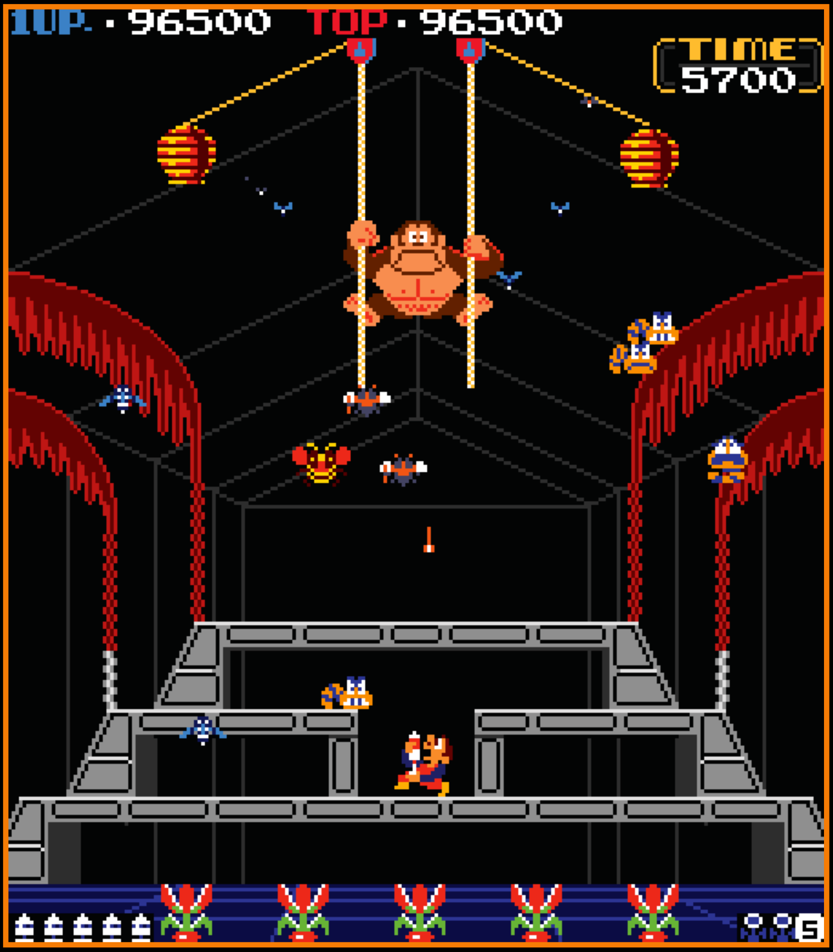
The way the insects swarm at the top of the screen and then swoop down owes a debt to *Galaga*, but Miyamoto has revealed that his blueprint for *Donkey Kong 3* was *Green House*, a popular Game & Watch game from 1982.

> "SOME HAVE LABELLED IT THE 'UNKONG' GAME, ON ACCOUNT OF IT INTENTIONALLY DISRUPTING A WINNING FORMULA"

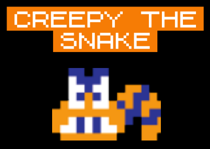

Nintendo
DONKEY KONG 3
A THRILLING battle! More EXCITING than ever!
Stanley and his sprayer vs. Donkey Kong's coconut attack!

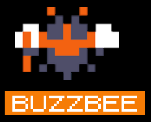

1UP 900
TOP 41800
TIME 5900

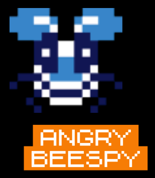
» [Arcade] If you allow DK to reach the foot of the vines, he'll drop down and stomp Stanley into the ground


1UP 96500
TOP 96500
TIME 5700

» [Arcade] The grey scene is identical to the blue one, save for the annoying gap in the middle platform which can cause many a lost life.


CREEPY THE SNAKE



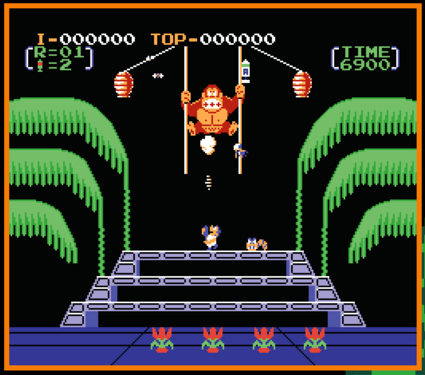

ANGRY BEESPY

CONVERSION CAPERS

IT WAS SLIM PICKINGS FOR DK'S THIRD OUTING

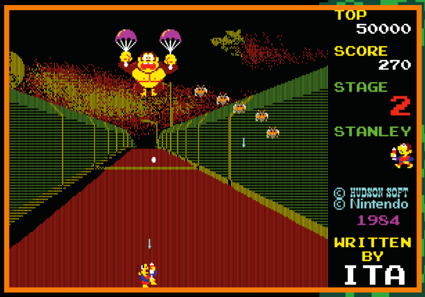
NES

■ A solid conversion from Nintendo, as you'd expect. It does feel a little cramped, thanks to the horizontal orientation, and it's still 'up to jump', despite the NES controller having two fire buttons, but it's perfectly playable and includes all of the key features from the original.


I-000000 TOP-000000
R=01
=2
TIME 6900

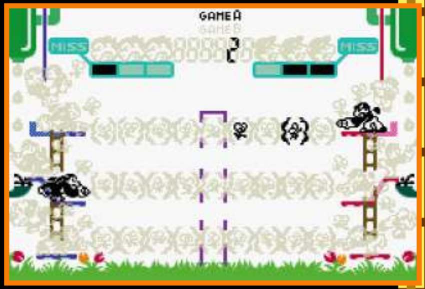
SHARP X1

■ This is a pure shooter with no platforming elements and few redeeming features. It was seemingly created to improve on the original by offering more scenes, but it's inferior in almost every way. The same game was also released for the NEC PC-6601/8801 computers.


TOP
50000
SCORE
270
STAGE
2
STANLEY
© HUDSON SOFT
© Nintendo
1984
WRITTEN BY
ITA

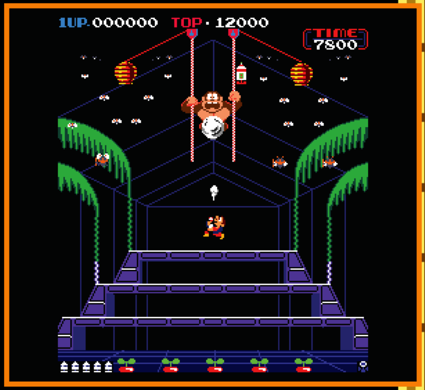
GAME & WATCH

■ Featuring a wide horizontal screen and two wired joypads, this is a complete departure from the original where you face off against the CPU or (preferably) a pal. It's an interesting fan curio for sure. Pictured here is the 'classic' rendition from *Game & Watch Gallery Advance*.


GAME A
MISS
MISS

SWITCH

■ Released in 2019 as part of Hamster's *Arcade Archives* series, this is a highly accurate conversion of the coin-op. One nice feature is that you can play it in TATE mode when undocked, which is absolutely the way you should be playing vertical games like this on Switch.

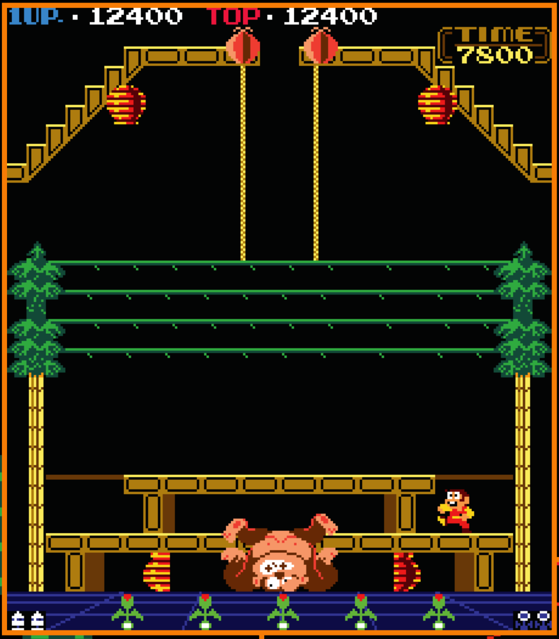

1UP 000000
TOP 12000
TIME 7800

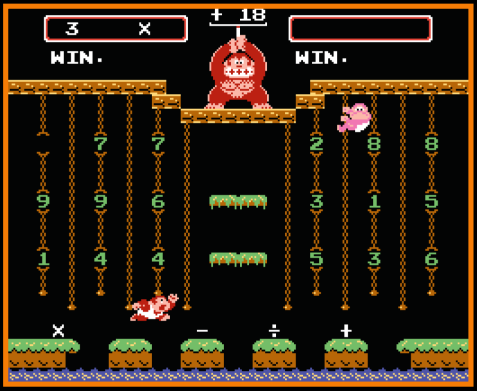
WONKY KONG

DONKEY KONG DOES LIKE TO MIX IT UP…

"MIYAMOTO HAS REVEALED THAT HIS BLUEPRINT FOR DONKEY KONG 3 WAS GREEN HOUSE, A POPULAR GAME & WATCH GAME FROM 1982"

» [Arcade] The little dance Stanley does when DK crashes to the ground is a Miyamoto moment to savour.

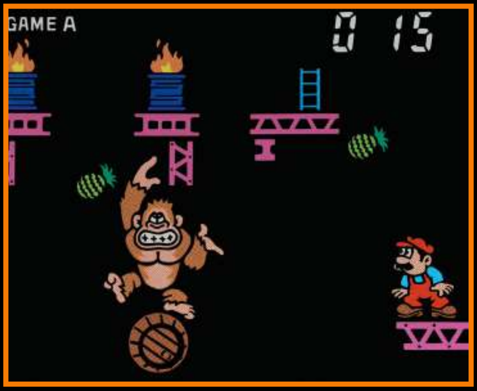




DONKEY KONG JR MATH

1983 • NES

Everyone loves edutainment games don't they? Apparently not, seeing as nobody bought this earnest effort that sees Junior and a pink-furred pal solve various math problems. As a result, Nintendo's 'Education Series' was permanently expelled after this single release.

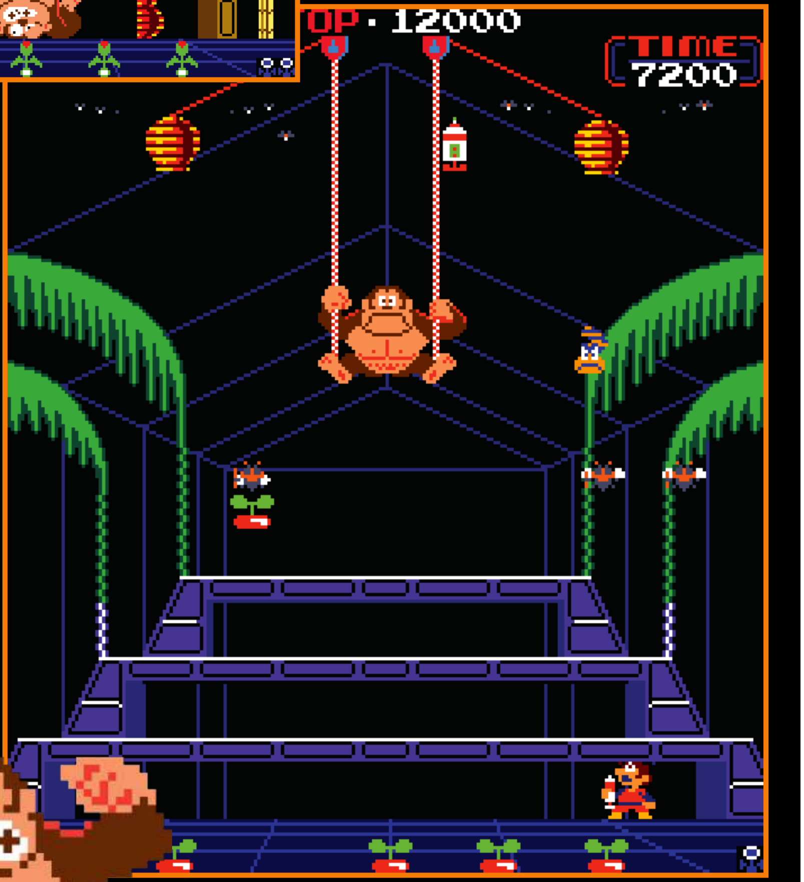


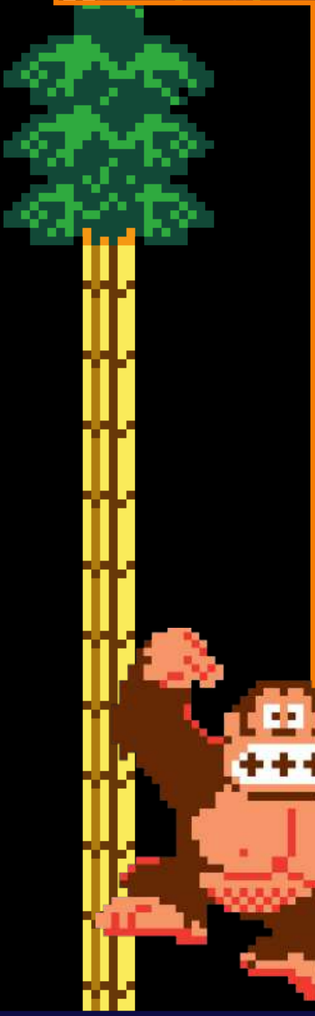
DONKEY KONG CIRCUS

1984 • Game & Watch

Ringmaster Mario returns to torment DK in this Panorama release that's an update of the earlier *Mickey Mouse* game. Balancing on a barrel, DK has to juggle pineapples while Mario chortles. It's fun for five minutes and not a patch on the other *Donkey Kong* G&W games.

» [Arcade] The flowers are a secondary objective. You can continue even if they're all stolen, but you'll miss out on precious points.



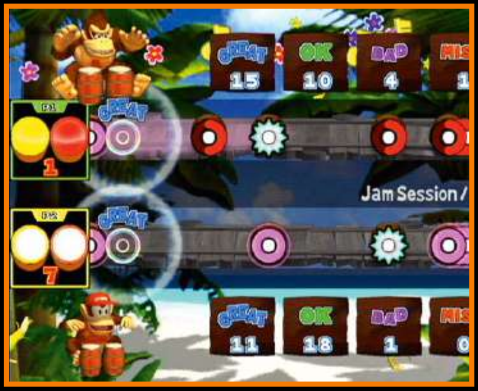


SUPER STANLEY

DK is absent but early versions of Creepies and Buzzbees appear, as does Stanley who uses his spray gun to keep the critters off his flowers. Stanley is listed in the manual as 'Fumigator', and he takes the traditional form of Mr Game & Watch in the game, but he was christened Stanley The Bugman in print ads. As Mario was making his bid for superstardom in *Mario Bros*, Stanley's services were retained for *Donkey Kong 3*. All that was then needed was the 800lb star of the show to gatecrash the party.

For Miyamoto, Donkey Kong had always been the focus. He's stated that after the huge success of the original coin-op, he wanted to feature DK as the hero in a game called *Donkey Kong's Revenge*. However, at the time DK was simply too ungainly to be a playable character, so his son Junior was drafted in. For the third game DK is once again the antagonist but he still takes centre stage. Visually he's more cartoon-like than ever before, with his range of expressions shifting from surprised to sad to mad. Consider this: in the game DK has 50 different animation states while Stanley has just 14. Interestingly, the game does include unused Junior sprites, suggesting that the star of the second game was destined to cameo in the third at some point.

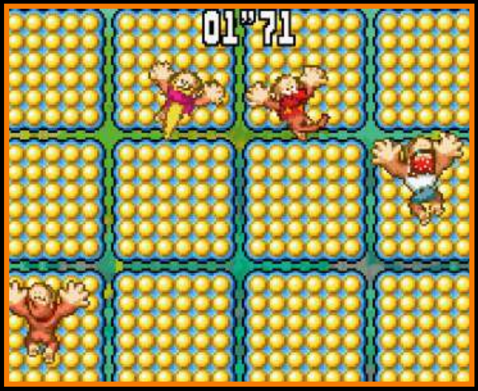
On its arrival in arcades the game picked up a positive review in the February 1984 issue of *C&VG* magazine, "The character's proven popularity, combined with the fast action and superior sound effects, make *Donkey Kong 3* a sure hit in the arcades." Sadly that wasn't the case, with reported unit sales of 5,000 in the US (compared to 30,000 for *Donkey Kong Jr* and 67,000 for *Donkey Kong* in the same region). There was no clamour for home versions either. The first two games were converted to numerous consoles and computers but *Donkey Kong 3* only received one faithful conversion to the NES in



DONKEY KONGA

2003 • GameCube

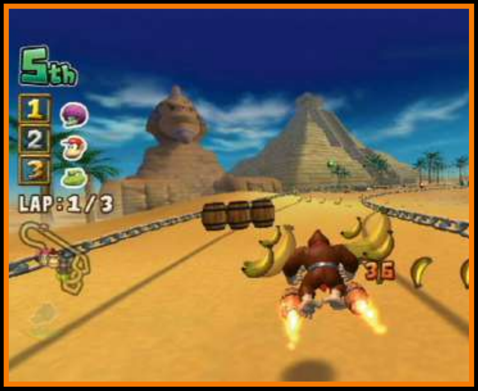
■ Developed by Namco, this enjoyable music game sees DK and friends tapping out rhythms on a special bongo controller. Two sequels followed (the third was a Japanese exclusive), plus *Donkey Kong: Jungle Beat*, a platform adventure that you controlled using the bongos.



DK: KING OF SWING

2005 • GBA

■ This puzzle platformer features a neat mechanic where you rotate around pegs using the GBA's shoulder buttons (so ideally you need to play it on real hardware). It's reminiscent of the old NES game *Clu Clu Land*. A DS sequel, *DK: Jungle Climber*, was released in 2007.



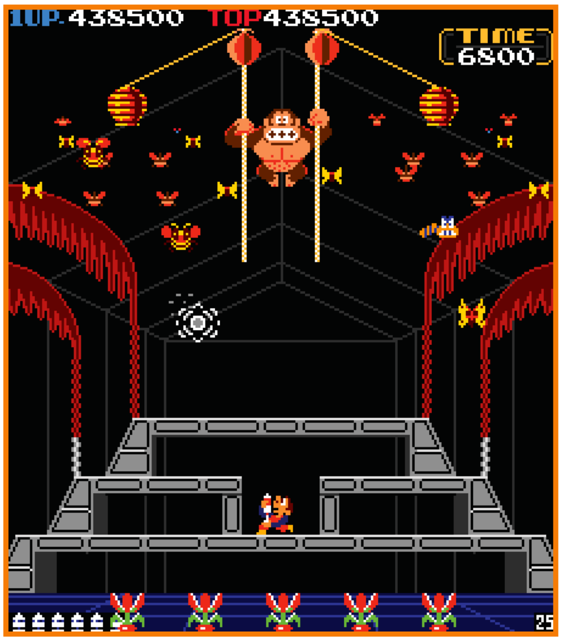
DONKEY KONG: BARREL BLAST

2007 • Wii

■ Yet another *Mario Kart* wannabe where you race around elevated tracks, trying vainly to control your character using the Wiimote and Nunchuck combo. It's not as bad as you might have heard but it is pretty tepid. Play as the Donkey Kong clan in *Mario Kart Wii* instead.

> **"DONKEY KONG 3 MAY LACK THE POPULARITY OF ITS PREDECESSORS BUT IT REMAINS OF INTEREST IN COMPETITIVE PLAY CIRCLES"**

1984. However, the same year did see two more products carry the *Donkey Kong 3* name. The first was developed by Hudson Soft and released exclusively for Japanese computers. Subtitled *The Great Counterattack*, it's a weird take on the coin-op where the greenhouse is gone, replaced by a series of strange backdrops (a highway, a cave, even outer space). DK now floats down the screen on mini parachutes and once again Stanley has to repel him while blasting bugs.

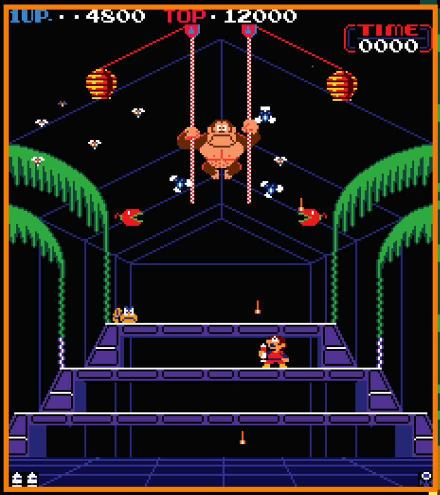


» [Arcade] As you progress through the game new enemies arrive including Beetles (from round 18) and Butterflies (from round 24).

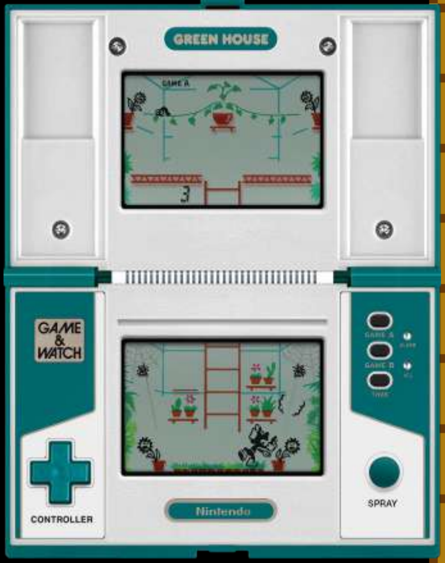
The second *Donkey Kong 3* was a Game & Watch release. As *Green House* already existed, Nintendo chose a different tack and released the game as part of its Micro Vs System range. Here, both Stanley and DK are armed with spray guns and must use them to blast Buzzbees at each other. The game was included in the 2004 *Game & Watch Gallery Advance* collection for the GBA, in both classic and modern forms, and in the latter Stanley was replaced by (who else?) Mario. Aside from fleeting appearances in various *Super Smash Bros* and *WarioWare* games, poor Stanley's Nintendo career was over.

Donkey Kong 3 **may lack the popularity of its predecessors but these days it remains of interest in competitive play circles.** While it doesn't have a 'kill screen' to aim for it does have its own quirk. "Something extremely unusual happens on round 160," says expert player George Riley, who holds the high score for the game at Twin Galaxies. "At round 160 the game starts repeating the blue scene over and over again. It does this 97 straight times until round 257 when it cycles back to the beginning. I was the first to discover this in 2010 and I labelled it the Repetitive Blue Screen, or RBS for short. Today it's actually a thing for some players to go for the RBS. Although it's not a kill screen, it's at a point where the difficulty level is almost on par with a *Donkey Kong* or *Donkey Kong Jr* kill screen."

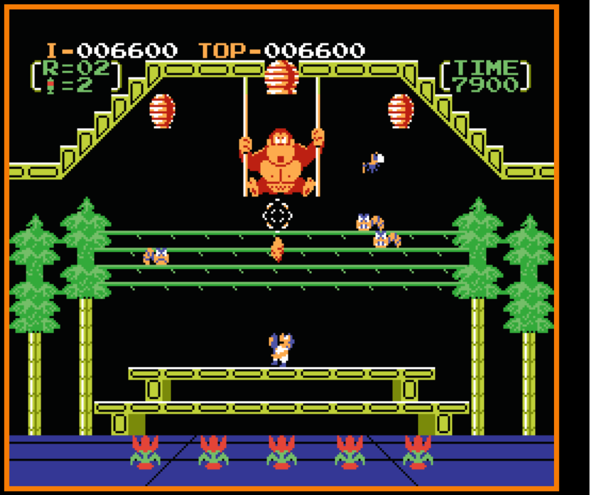
If you fancy taking on the RBS challenge – or just reminding yourself of when the series took a sharp left turn into shoot-'em-up territory – *Donkey Kong 3* is available for the Nintendo Switch as part of Hamster's Archive Archives range. ✱



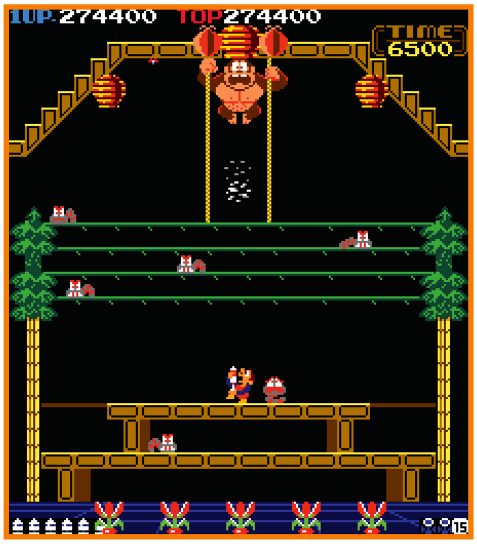
» [Arcade] If the timer runs down to zero, Nibbers will chew through the vines and free DK.

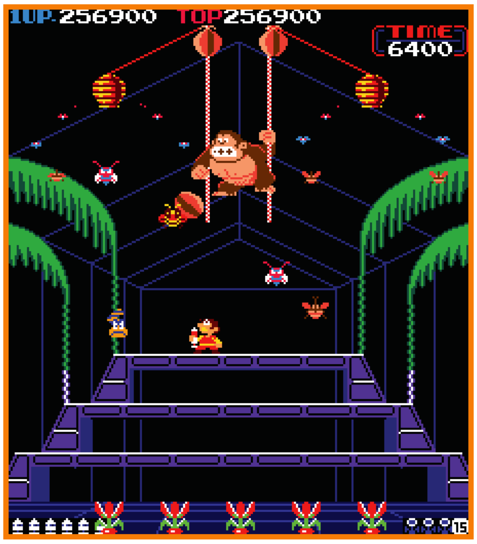


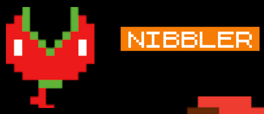
» [Game & Watch] Stanley made his debut in *Green House*, the handheld game that served as the main inspiration for *Donkey Kong 3*.

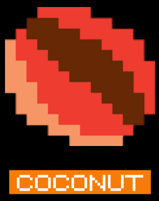


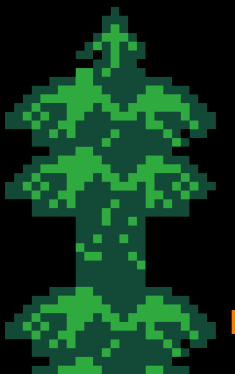
» [NES] Nintendo's home conversion was later included as a Virtual Console title on Wii, Wii U and 3DS.



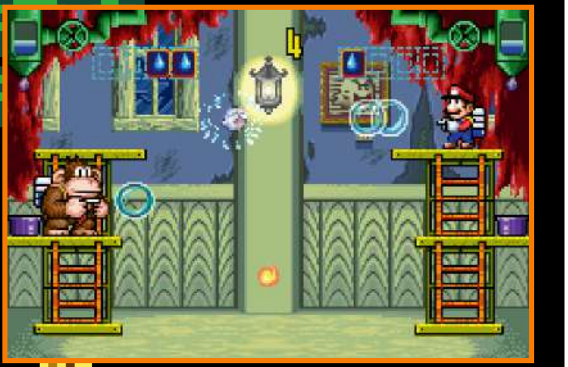




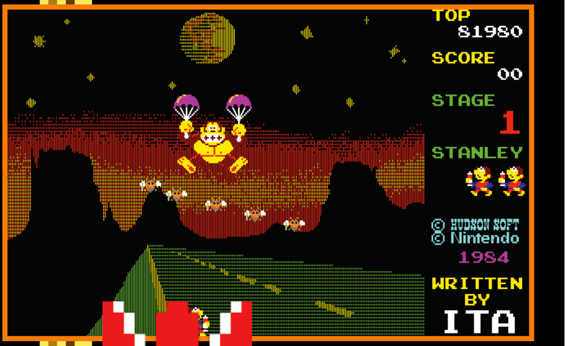




SUPER-SPRAYER



» [GBA] Stanley gets cancelled! The modern update of *Donkey Kong 3* (Game & Watch version) sees Mario take on DK.



» [Sharp X1] Hudson Soft's loose conversion was largely unknown in the West, but it was preserved by fans and shared online in 2018.

THE KING OF KONG 3

MEET DONKEY KONG 3'S GREATEST PLAYER GEORGE RILEY

How did your relationship with *Donkey Kong 3* begin?
The first time I saw the game was at a South Pasadena Boys Club in 1985. I was around nine or ten at the time. While I was OK in certain games I excelled at *Donkey Kong 3*. In 1986 I got a score of 1.45m. They had just put up a scoreboard and I had the highest score. I had to move at the time, and thought some older kid would eventually beat it, but when I came back six months later the score still stood strong.

When and where did you register your Twin Galaxies high score of 3,538,000?
I achieved the 3.53m score in Seattle in 2011. There are four difficulty settings and it was achieved on the second hardest setting. A little while later I got a 4.25m score. Twin Galaxies was under new ownership and I found out all my scores were eliminated so I had to reprove them. I had my 3.53m DVD recording but somehow had lost my 4.25m score. I do have a score on MAME of 6.1m, so I might still have some unfinished business with the game.

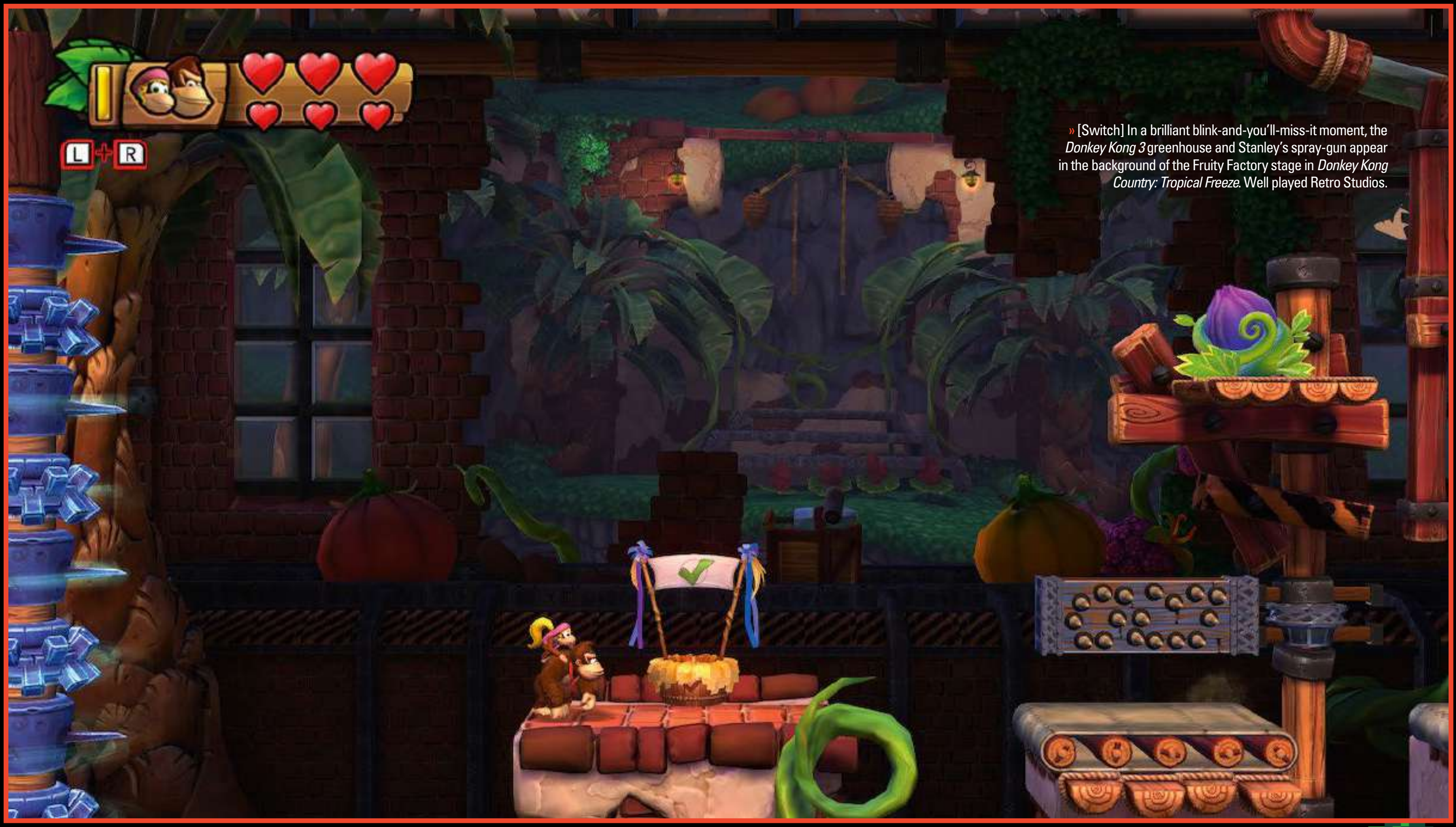
Do you have a *Donkey Kong 3* cab?
I used to. My very first world record of 2.78m was on that machine. Unfortunately I hit a rough patch in my life where I had to give it away. Things are much better now, but I still haven't bothered to get another machine. Maybe one day I will.

> **"WHEN I PLAY THIS GAME I BECOME A GREAT GAMER. IT'S LIKE I'M A DIFFERENT PERSON"**
> **GEORGE RILEY**

What are your thoughts on the NES conversion?
I'm thankful they ported it to the system but it pales in comparison to the arcade version. I was expecting so much more and graphically speaking, it doesn't hold up.

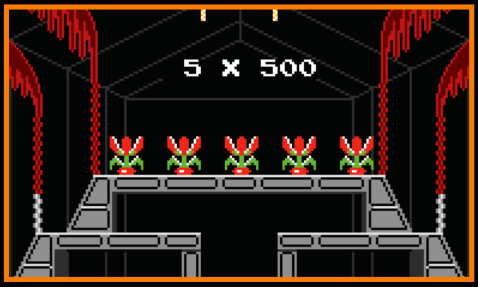
Why do you feel the game isn't as popular as the other *Donkey Kong* arcade games?
At its heart it's a shooter game. I think that was a bridge too far for most *Donkey Kong* players. Having said that, the game has sort of a cult following. Some games that were way more popular back in the day are not as competitive as *Donkey Kong 3* is. A good example is *Space Invaders*. I'd rather a game have a long burn in regards to competition than a short and quick burn.

Do you feel it still has some of that Miyamoto magic?
It definitely has. I absolutely love this game. I'm a slightly above-average gamer but when I play this game I become a great gamer. It's like I'm a different person. I have nothing but love for Miyamoto. I'm very thankful for him introducing this game to the world.


» [Switch] In a brilliant blink-and-you'll-miss-it moment, the *Donkey Kong 3* greenhouse and Stanley's spray-gun appear in the background of the Fruity Factory stage in *Donkey Kong Country: Tropical Freeze.* Well played Retro Studios.

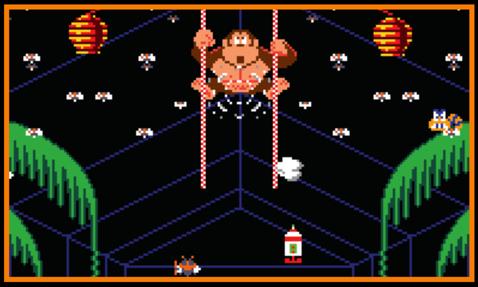
KONG MASTERKLASS

TIPS TO HELP YOU TOPPLE DK



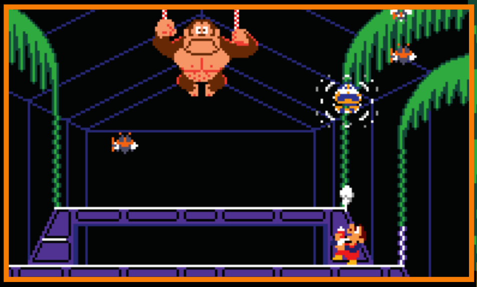
FLOWER POWER

■ If you're aiming for a high score then you should prevent the Buzzbees from stealing your flowers. You get points for each plant that remains at the end of the round, plus a bonus if you protect all five. You also get rewarded based on the time remaining on the clock.



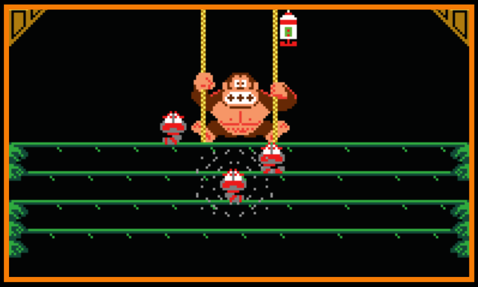
SUPER-SPRAY ME

■ Once per life the Super-Sprayer will appear on DK's vine. Blast him until he knocks the precious item loose, then catch it and use its enhanced power to propel DK to the top of the screen. It can also kill Creepies, but note that it's a limited upgrade that quickly expires.



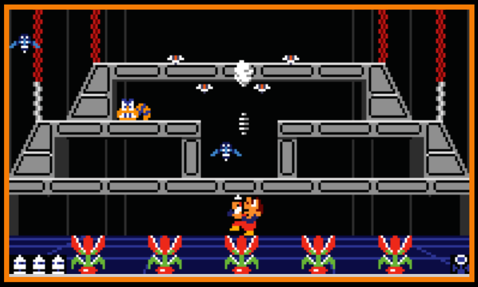
CREEPY HASSLE

■ Creepy The Snake can't be killed (unless you have the Super-Sprayer), but you can make it retreat by blasting it as soon as it appears on the vine in the blue and grey scenes. If you fail to hit it, it'll slither its way to your platforms where it becomes a far greater pest.



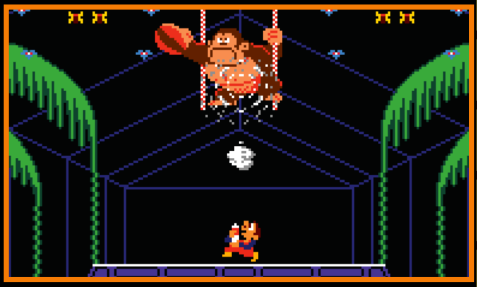
SNAKE PASS

■ The gold scene requires a little strategy. If you shoot indiscriminately you'll temporarily stun the Creepies on the vines and this may prevent your shots from hitting DK. So keep one eye on the Creepies and only fire off shots when they're well out of the way.



SOUND ADVICE

■ When you reach round six the Attacker will enter the fray. This flying menace will hover around your platforms before whizzing across the screen. Luckily it makes a distinctive sound before it attacks, so listen up and get ready to hop or drop out of the way.



LOVELY COCONUTS

■ DK will throw indestructible coconuts on the gold scene in an attempt to finally flatten you. However, when you reach round 15, he'll begin to fling coconuts on every scene going forward. Factor this in as it may disrupt any playing patterns you've been using.

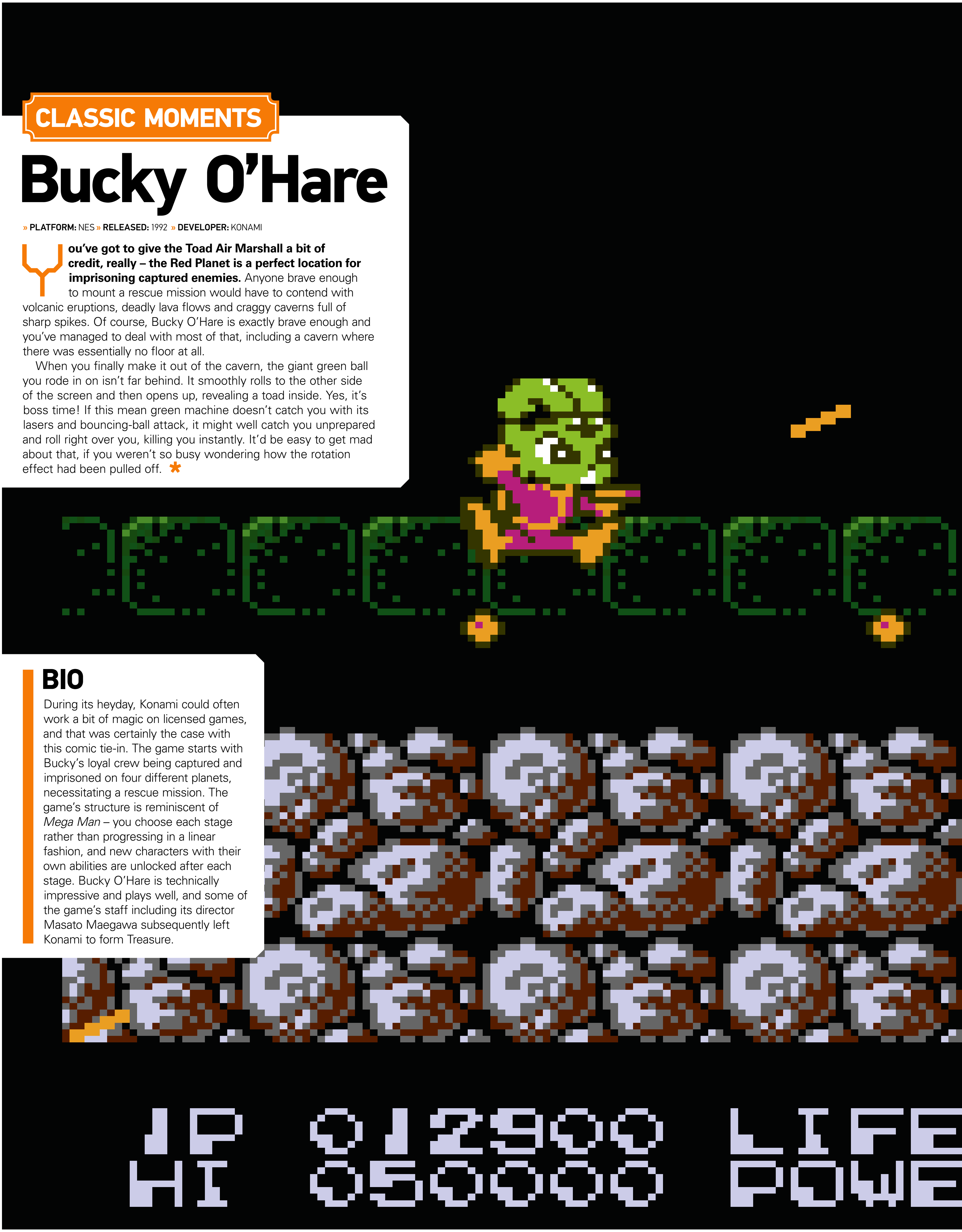
CLASSIC MOMENTS

Bucky O'Hare

» **PLATFORM:** NES » **RELEASED:** 1992 » **DEVELOPER:** KONAMI

You've got to give the Toad Air Marshall a bit of credit, really – the Red Planet is a perfect location for imprisoning captured enemies. Anyone brave enough to mount a rescue mission would have to contend with volcanic eruptions, deadly lava flows and craggy caverns full of sharp spikes. Of course, Bucky O'Hare is exactly brave enough and you've managed to deal with most of that, including a cavern where there was essentially no floor at all.

When you finally make it out of the cavern, the giant green ball you rode in on isn't far behind. It smoothly rolls to the other side of the screen and then opens up, revealing a toad inside. Yes, it's boss time! If this mean green machine doesn't catch you with its lasers and bouncing-ball attack, it might well catch you unprepared and roll right over you, killing you instantly. It'd be easy to get mad about that, if you weren't so busy wondering how the rotation effect had been pulled off. *



BIO

During its heyday, Konami could often work a bit of magic on licensed games, and that was certainly the case with this comic tie-in. The game starts with Bucky's loyal crew being captured and imprisoned on four different planets, necessitating a rescue mission. The game's structure is reminiscent of *Mega Man* – you choose each stage rather than progressing in a linear fashion, and new characters with their own abilities are unlocked after each stage. Bucky O'Hare is technically impressive and plays well, and some of the game's staff including its director Masato Maegawa subsequently left Konami to form Treasure.

MORE CLASSIC BUCKY O'HARE MOMENTS

Terror In The Sky

Towards the end of the Green Planet stage, you'll end up running headlong into a full on assault by the toads, the sky completely filled with their fighter craft. All you have to do is dodge their laser fire while making your way to the right of the scene, but it's easily one of the coolest-looking scenes in any NES game.

Cold Crisis

Floating along on an ice floe isn't the best of situations to be in at any time. When the terrible toads are conducting bombing raids on the only thing keeping Bucky from having the world's coldest bath, it's a real predicament. You've got to try to survive as the icy mass below is shattered into smaller chunks.

Cell Mates?

Upon rescuing his crew, Bucky learns that the whole planet-hopping adventure was a set up designed to lure him out, and the whole gang soon find themselves prisoners of the Toad Empire. To escape, Bucky has to battle not only the prison guards, but his loyal crew – who have been stripped of their loyalty with mind control.

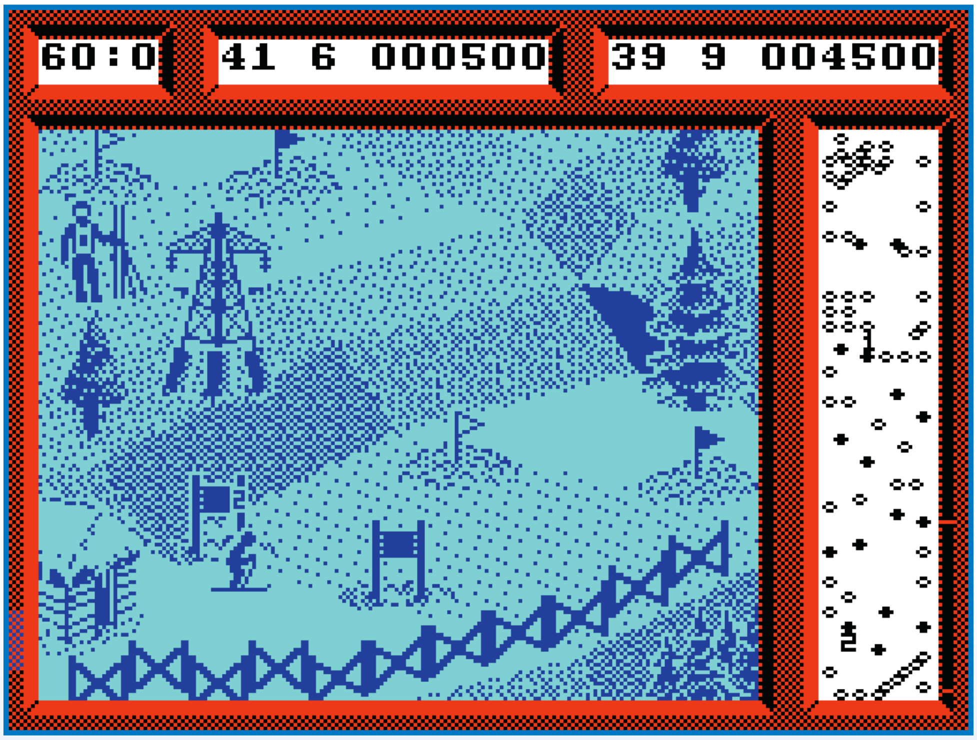
Wheel Of Misfortune

Once you've reached the magma core of the enemy stronghold, you'll encounter a tricky challenge – a circular maze. Getting in is easy, but once you're there you need to rotate the maze back and forth, allowing movement both within the maze and eventually out of it. There's no impressive visual effect, but it's clever level design.

THE MAKING OF
PROFESSIONAL SKI SIMULATOR

CRASH MAGAZINE SAID, "THIS SIMULATION IS SO GOOD, IT'S JUST LIKE BEING ON THE SLOPES." IF THAT'S THE CASE, SKIING MUST BE A FRUSTRATING JAUNT WHERE YOU SPEND MOST OF YOUR TIME ON YOUR BACKSIDE OR SPINNING AROUND AIMLESSLY BECAUSE THIS WAS ONE CHALLENGING GAME!

WORDS BY DAVID CROOKES



» [ZX Spectrum] And number two has made it, with player one lagging behind and needing to navigate via the radar!

Brothers Philip and Andrew Oliver are known to be the most prolific 8-bit videogame developers of all time. They have an entry to that effect in the Guinness World Records, since they designed 35 titles between 1984 and 1992, including a string of number ones.

Given how hard they must have been working (that's one game every 2.7 months!), you'd perhaps think holidays were out of the question. But no. In the spring of 1987, the siblings were invited to join Codemasters' founders Richard and David Darling on a skiing holiday in the quaint village of Kaprun in Austria – and they came back with an idea for, you guessed it, yet another game!

At this time, the Oliver twins, as they became known, were on top of the world. "*Grand Prix Simulator* was riding high in the charts and royalties were coming in from *Super Robin Hood* and *Ghost Hunters*," Philip says. The brothers were also working on a new game that – unbeknown to them – would spawn a series and become their crowning glory. "We were in the process of writing *Dizzy – The Ultimate Cartoon Adventure*," Philip affirms. Their careers were not going downhill any time soon.

Work on *Dizzy*, however, delayed the development of their latest idea: to follow *Grand Prix Simulator* with another potentially lucrative sport simulation game, this time based on skiing. "We'd seen classic maps of ski runs and they'd reminded us of *Marble Madness* which was one of our favourite games at the time," Philip adds. "And that's how things got rolling, although we didn't start on the skiing game until June that year."

When work on the title finally got underway, the brothers began by writing a neat A4 design document that detailed how they envisaged the screen would look and the game would play out. They wanted a competitive title in which players would navigate their skiers between posts in a race to the finish line against a rival. They also sought to incorporate a time limit, bonus flags and a qualifying time that players had to beat.

Yet some of the early ideas for what became *Professional Ski Simulator* were dependent on the amount of memory available on computers at the time. The Olivers wrote of their desire to include non-playable skiers, for example, but it was "dependent on speed and memory" and, ultimately, they figured it would simply slow the game down. They also wanted to have eight pistes (again "dependent on memory") yet they ended up reducing the number to seven. "It was easily our most ambitious game to date and, yes, we developed a skiing game in the height of summer," says Philip who, along with his brother, worked on the title for ten weeks.

As well as being inspired by the isometric 3D terrain of *Marble Madness*, the Olivers drew from their past experience in developing *Grand Prix Simulator* – a game that was, in turn, inspired by *BMX Simulator* by Richard Darling. "Those two games were fixed-screen experiences and we knew we couldn't get away with this for our skiing game," Philip says, of the decision to create a downward-scrolling title. "But the scariest part was working out if we could actually create a scrolling isometric 3D landscape, so we tackled this first."

Professional
Ski
Simulator
NEW RELEASE
Code Masters

IN THE KNOW

» **PUBLISHER:** CODEMASTERS

» **DEVELOPER:** THE OLIVER TWINS

» **RELEASED:** 1987

» **PLATFORM:** ZX SPECTRUM, VARIOUS

» **GENRE:** SPORTS

» Andrew Oliver takes to the slopes with style during the holiday in Kaprun, Austria, which sparked the idea for *Professional Ski Simulator.*

The developers knew straight away that the course data would need to be stored very efficiently. "Games had to fit into 34K which is what was left in a ZX Spectrum 48K computer after you took away screen RAM," Philip says. "Scrolling the screen on a Spectrum was also a challenge because it was something the computer was poor at. The only way was to copy every single pixel, one by one, so we windowed the course to reduce the number of pixels to 192x152, but that was still 29,184 pixels!

"Thankfully the mono-colour pixels of a ZX Spectrum meant eight pixels were stored in one byte so this meant moving 3,648 bytes to scroll the screen up one pixel. This was still really too big a task for the Z80 processor running at 3.5Mhz and, as a result, the scrolling was disappointingly slow. But, having seen the speed, we had to decide between abandoning it or keep going. It did look cool, so we decided to continue!"

Working from Philip's bedroom, the game soon began to take shape. For starters, just as in *Grand Prix Simulator*, the brothers decided to allow one player to go up against the computer or have two players competing against each other. The twins also wanted players to thrust by going from a standing to a crouched position and their design documents said players should corner more quickly if they crouched going in, yet fall if they stood while turning.

In reality, however, the game ended up with fiddly controls that required players to put in a lot of practice to have any chance of success. Since the skiers headed towards players as they navigated the slope, the trick was to imagine the course from the perspective of the sprite which meant hitting left would send the player right, and vice versa.

> "WE'D SEEN CLASSIC MAPS OF SKI RUNS AND THEY'D REMINDED US OF MARBLE MADNESS WHICH WAS ONE OF OUR FAVOURITE GAMES AT THE TIME"
>
> **PHILIP OLIVER**

"We employed the standard rotation controls from *Grand Prix Simulator* but because players were coming down the screen, we should have reversed this so that pressing left, turned the player left, not anti-clockwise which resulted in the skier turning right," Philip says. "During development, we got used to this, and never tried it with other people. Had we done so, we would have immediately spotted and rectified the issue."

The length of the courses was dictated by memory capacity and the desire to fit in seven pistes. "The plan was for the scrolling to be much quicker and the gates to be positioned so it really was more like downhill skiing," Philip continues. "But the other problem that prevented this was the amount of data that would have been required to make longer courses. As a result, we had to focus on a much slower game and, rather than players holding down 'crouch' for long sections, they ended up having to 'push' the skiers along."

The tight time limits created an additional challenge. These were determined by the game's scrolling speed, with the Olivers recording their own times going down the slope and working ▶

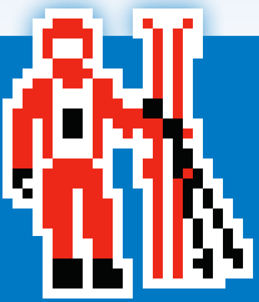
DEVELOPER HIGHLIGHTS

SUPER ROBIN HOOD
SYSTEM: AMSTRAD CPC, VARIOUS
YEAR: 1986

GHOST HUNTERS (PICTURED)
SYSTEM: AMSTRAD CPC, ZX SPECTRUM, C64
YEAR: 1987

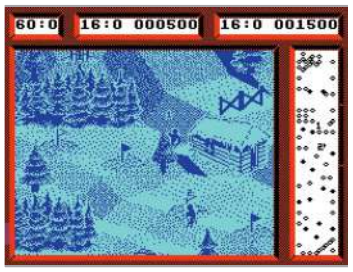
FANTASY WORLD DIZZY
SYSTEM: AMSTRAD CPC, VARIOUS
YEAR: 1989

CONVERSION CAPERS



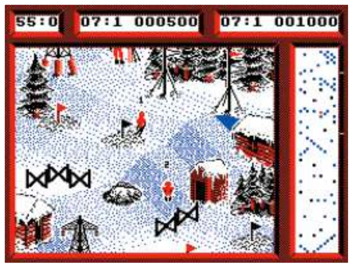
ON WHICH SYSTEM DID IT REACH ITS PEAK?

ZX SPECTRUM



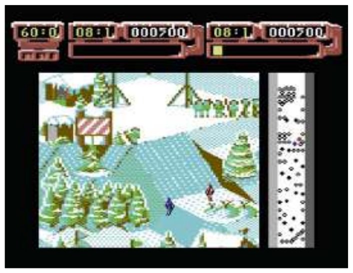
■ The original version introduces the concept: players ski down the slopes, through all of six gates, being sure not to thrust when flying through the air to qualify for the next piste. Sounds easy? Not a bit! The action is fast yet jerky, the sprites lack detail and, because everything is so blue, numbers are used to identify who is who.

AMSTRAD CPC



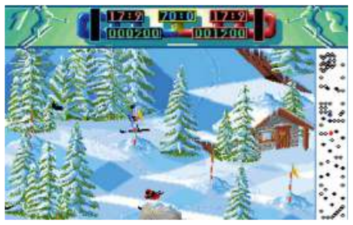
■ Far more colourful thanks to good use of the CPC's Mode 1 graphics, this port made it easier to identify the skiers and see where you were going. It was otherwise a faithful conversion with some great digitised speech and slightly smoother scrolling. Its slower speed made it a little less frustrating.

COMMODORE 64



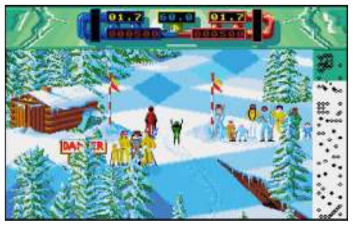
■ Developed by The Highlanders, this port had cool title music, smoother graphics, smaller sprites and a slicker HUD. It also had clearer yellow bars indicating how far off the ground the skier was when jumping so players knew when to avoid turning or thrusting. You could also spot a roaming yeti!

AMIGA

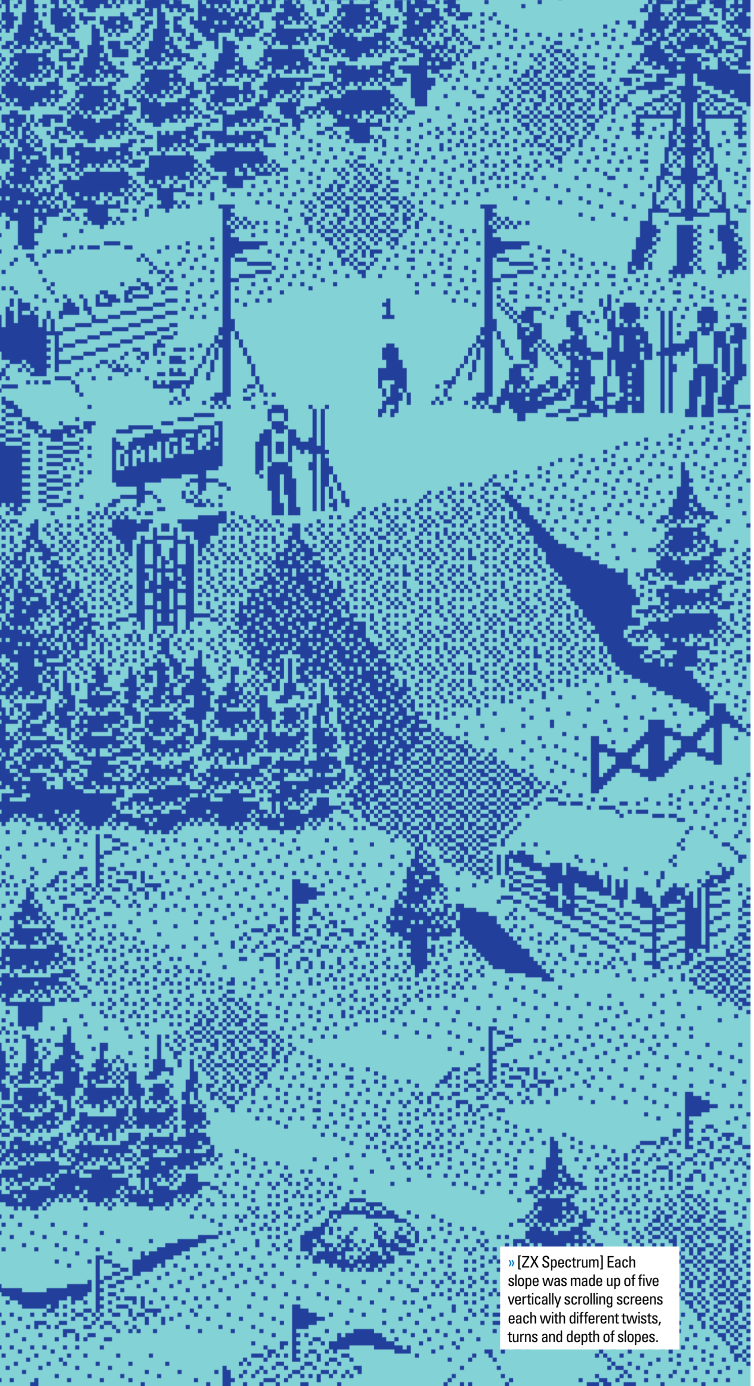


■ Renamed *Advanced Ski Simulator* on the 16-bits, Codies' skiing game stuck to the gameplay of the original 8-bit version – yet it came in at an eye-watering £19.99. Still, it at least looked decent enough, from the demo-like title screen through to the slopes themselves, and it included some pleasant sampled sound.

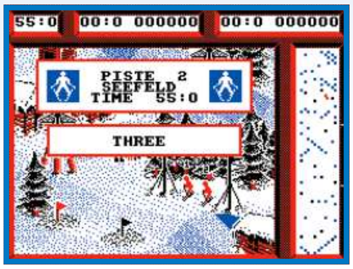
ATARI ST



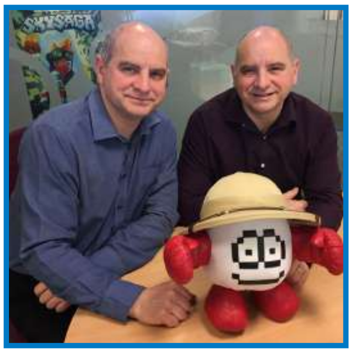
■ The Atari ST version followed the Amiga port – at a much more wallet-friendly £4.99 – and it was identical in terms of play. The main differences were a slightly tweaked HUD, altered time limits (60 seconds for the first piste as opposed to 70 on the Amiga, for instance), different skier colours and a changed titled tune.



» [ZX Spectrum] Each slope was made up of five vertically scrolling screens each with different twists, turns and depth of slopes.


55:0 00:0 000000 00:0 000000
PISTE 2
SEEFELD
TIME 55:0
THREE

» [Amstrad CPC] There were different time limits for each of the pistes, just to make the game even harder than it already was.



» The Olivers worked on a number of *Dizzy* and *Simulator* games for Codemasters.

ADVANCED
Ski
Simulator
AMIGA
A500/A1000/A2000
£4.99
RECOMMENDED RETAIL PRICE
SEAL of Quality
Code Masters
16-BIT
THE ACTION STARTS HERE
"ADDICTIVE AND THOROUGHLY PLAYABLE" – ACE MAGAZINE

» When originally sold for £19.99, Amiga owners thought the Codies were taking the piste.

out an ideal limit for players. It meant gamers not only had to try and win a race but finish each course before the time ran out. As you can imagine even if you've never tackled *Professional Ski Simulator*, it wasn't the easiest game in the world to play – more so because your skier could simply disappear off the top of the screen if you were going too slow.

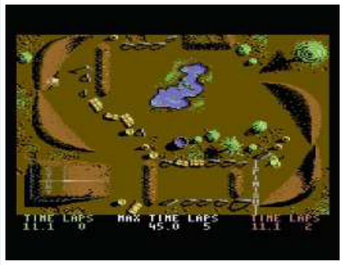
Running down the right-hand side of the screen was a radar section. "It was purely added to disguise the scrolling window size," Philip says. Yet it doubled as a way for players to see exactly where they were on the vertically scrolling slope. This potentially came in handy when players failed to keep within a short distance of their rival or couldn't keep up with the scrolling screen. In these circumstances, the lagging skier would disappear out of camera shot, prompting the player to switch their attention to the radar map.

The idea was that gamers would attempt to navigate back into view which, in reality, was something that was almost impossible to do. Part of the problem was that it was really difficult to figure out which way a skier was pointing when looking at the radar. "We realised that players could get swept off the back of the screen if they were really slow but we felt it was OK to allow this to happen because they would be unlikely to catch the lead player anyway," Philip says. It was a deliberate quirk that didn't always go down too well by critics and players alike.

Still, slowly but surely, the game began to take shape. The brothers worked on refining the graphics, adding trees and log cabins on the snowy slopes to lend it the appropriate atmosphere. "We created all the in-game graphics during development," says Philip. Then, when the game was finished, James Wilson created the title screen – a striking image of an athletic-looking skier navigating a steep slope which proved to be

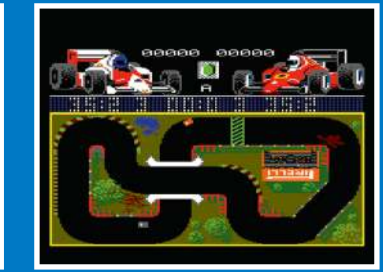
SIMULATE THIS

CODEMASTERS HAD A COOL SELECTION OF SIMS


TIME LAPS 11.1 0
MAX TIME LAPS 45.0 5
TIME LAPS 11.1 2

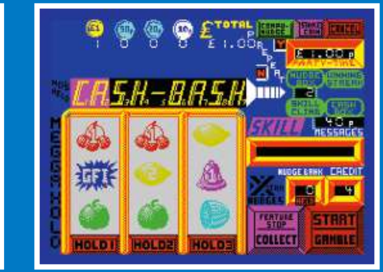
BMX SIMULATOR

■ Before founding the Codies, Richard and David Darling developed *BMX Racers* for Mastertronic, a game which sold 345,423 copies! They hoped to get Codemasters off to a 'wheelie' good start in 1986 so created this successor – a top-notch, top-down, single-screen arcade racer across seven mud tracks strewn with obstacles.



GRAND PRIX SIMULATOR

■ With *BMX Simulator* riding high and becoming the number one best seller on the Commodore 64, the Oliver Twins created a version involving cars. Developed over two months, it adopted the same overhead view as the Darling's game and had up to two players completing three laps around as many as fourteen tracks.


TOTAL
£1.00
CASH-BASH
SKILL
MESSAGES
NUDGE BANK
CREDIT
FEATURE STOP
START
COLLECT
GAMBLE
HOLD1
HOLD2
HOLD3

FRUIT MACHINE SIMULATOR

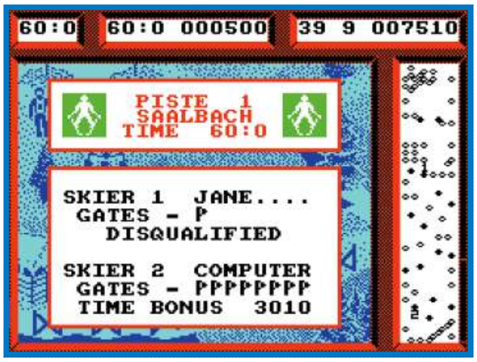
■ This replication of a one-armed bandit had one clear problem: it could have been the best simulation in the world but you'd still be walking away without a cash win. That said, you wouldn't be losing money either and there was enough to keep a player engaged for a short while. It sold enough to spawn a sequel in 1990.

another great drawing by the naturally gifted artist who sadly passed away the following year.

The game was released for the ZX Spectrum in 1987, with the Olivers also developing a version for the Amstrad CPC. Since the Olivers didn't want to spend time learning how to work with other computers, in particular the 16-bits, it was converted to the Commodore 64, Atari ST and Amiga by The Highlanders – brothers, Andrew, Robbie and Stewart Graham, a group of demoscene coders well-known for sharing their work on the Compunet network.

"We called ourselves The Highlanders because we were Scottish and not too far from the highlands. It also tied in with the popular movie," Andrew Graham says. "I did the coding and Robbie and Stewart were doing the graphics for lots of demos but we went on to make some games and we did some conversion work during the school holidays. After making *Trojan Warrior* for Firebird, we had a few jobs from Codemasters and that's how we got involved with *Professional Ski Simulator*."

By all accounts, the Commodore 64 version was a tricky port. "In many ways the C64 is superior to the ZX Spectrum but this one of those types of games where the Spectrum had the edge in pushing pixels to the screen," Andrew explains. "I had to use hardware sprites for the characters but bitmap graphics for the scenery so when the characters went behind the trees, I had to mask off the part of the sprite that was hidden. I remember being pretty chuffed that it worked as seamlessly as it did."



PISTE 1
SAALBACH
TIME 60:0

SKIER 1 JANE....
GATES - P
DISQUALIFIED

SKIER 2 COMPUTER
GATES - PPPPPPPP
TIME BONUS 3010

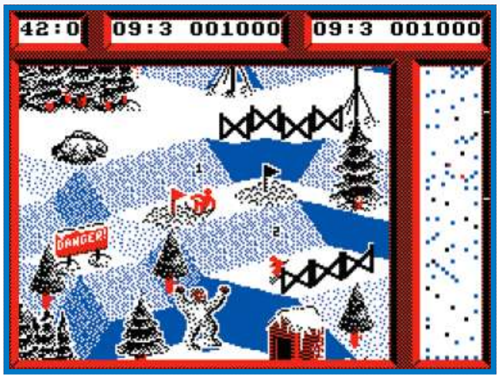
» [ZX Spectrum] Players had to get through every gate within the time limit to qualify for the next piste.

The 16-bit ports – renamed *Advanced Ski Simulator* – sadly suffered because they were too similar to the 8-bit versions. Magazine reviewers expressed disappointment that the game didn't make more of the advanced hardware and it didn't help that the game on the Amiga sold for £19.99 as opposed to the £1.99 retail price of the 8-bit versions. "We actually had nothing to do with its production or its pricing and we were surprised when we saw it," Philip says.

Had they been involved, the Olivers say they would have pushed for some extra features. "We would have asked them to create a version true to the original vision – that is, fast scrolling, longer courses and a fire button used to crouch and increase speed," says Philip. "That said, it looked fantastic and whilst £20 was expensive for a Codemasters game, this was the regular price of 16-bit computer games at the time."

Andrew Graham certainly remembers its production. "It was just done as a straight conversion of the Spectrum game so the underlying gameplay was the same," he says. "I guess with the enhanced 16-bit graphics, people were expecting more and I can understand that but it was really beyond the scope of the project."

There were tiny tweaks such as increasing the time in the Atari ST version to 70 seconds. "I can't remember exactly why that was but I guess the producer or one of the Darlings played it through and requested that the first level should be easier," Andrew says. "But here's a fun fact: the audio in the Amiga version includes the crowd cheering and ringing cowbells. I was in the second year of university at the time and I got some friends to record that in my room with some pots and pans. I think someone knocked on the door asking what all the noise was about."

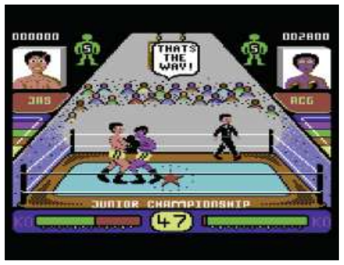


» [Amstrad CPC] In the final piste, you get to see a yeti – assuming you could get this far anyway.

Alas, the 16-bit versions didn't sell as well as those on the 8-bits but Codemasters was nevertheless pleased with the game's overall reception. "We don't have exact sales numbers because royalty statements didn't show running totals and they also changed around 1988 to reporting income only rather than sales," says Philip. "But it sold quite well – probably between 100,000 and 150,000 boxes across all versions with most of those being on the Spectrum and Amstrad."

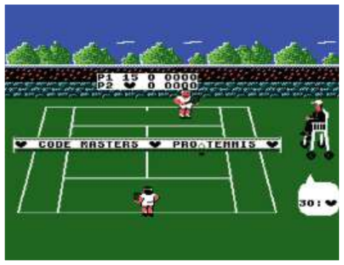
That, you'd suspect, covered a good portion of the cost of the skiing holiday – but they were also able to run the trip through their accounts as research (explaining why the box inlay included the words, "Based on the authors' experience in various parts of Austria"). This was something they couldn't do for their next game, *3D StarFighter*, as their careers continued to soar. ✱

> "IT SOLD QUITE WELL – PROBABLY BETWEEN 100,000 AND 150,000 BOXES ACROSS ALL VERSIONS"
> PHILIP OLIVER



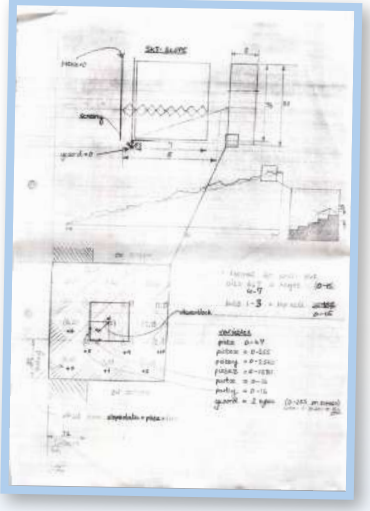
PRO BOXING SIMULATOR

■ This game was a budget re-boxing of Superior Software's *By Fair Means Or Foul* – but you wouldn't have known from the cover which boasted "New Release" (Codemasters apologised). Still, it was a solid enough game, pitting players against six tough opponents while letting them kick, head-butt and punch below the belt.

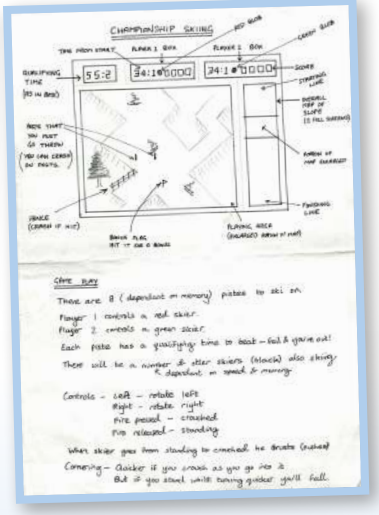


PRO TENNIS SIMULATOR

■ Designed by Gavin Raeburn and programmed by Mark Rivers, this fast, challenging two-player tennis game wasn't strictly a simulation (were any of them?) but its cartoon-like appearance, three levels of skill and the inclusion of grass and clay courts certainly made for an ace experience despite some fiddly controls.



» Before coding the game, the Oliver twins needed to figure out if they could create a scrolling isometric 3D landscape.


CHAMPIONSHIP SKIING
TIME FROM START
PLAYER 1 BOX
PLAYER 2 BOX
QUALIFYING TIME
55:2
34:10 0000
34:10 0000
SCORE
STARTING LINE
OVERALL MAP OF SLOPE
FINISHING LINE
FENCE (CRASH IF HIT)
PLAYING AREA

GAME PLAY

There are 8 (dependant on memory) pistes to ski on.

Player 1 controls a red skier.
Player 2 controls a green skier.

Each piste has a qualifying time to beat – fail & you're out!

There will be a number of other skiers (black) also skiing
← dependant on speed & memory

Controls – Left – rotate left
Right – rotate right
Fire pressed – crouched
Fire released – standing

When skier goes from standing to crouched he [illegible]

Cornering – Quicker if you crouch as you go into it
But if you stand while turning quicker you'll fall.

» Philip and Andrew Oliver used pen and paper to meticulously design *Professional Ski Simulator*.

TurboVision

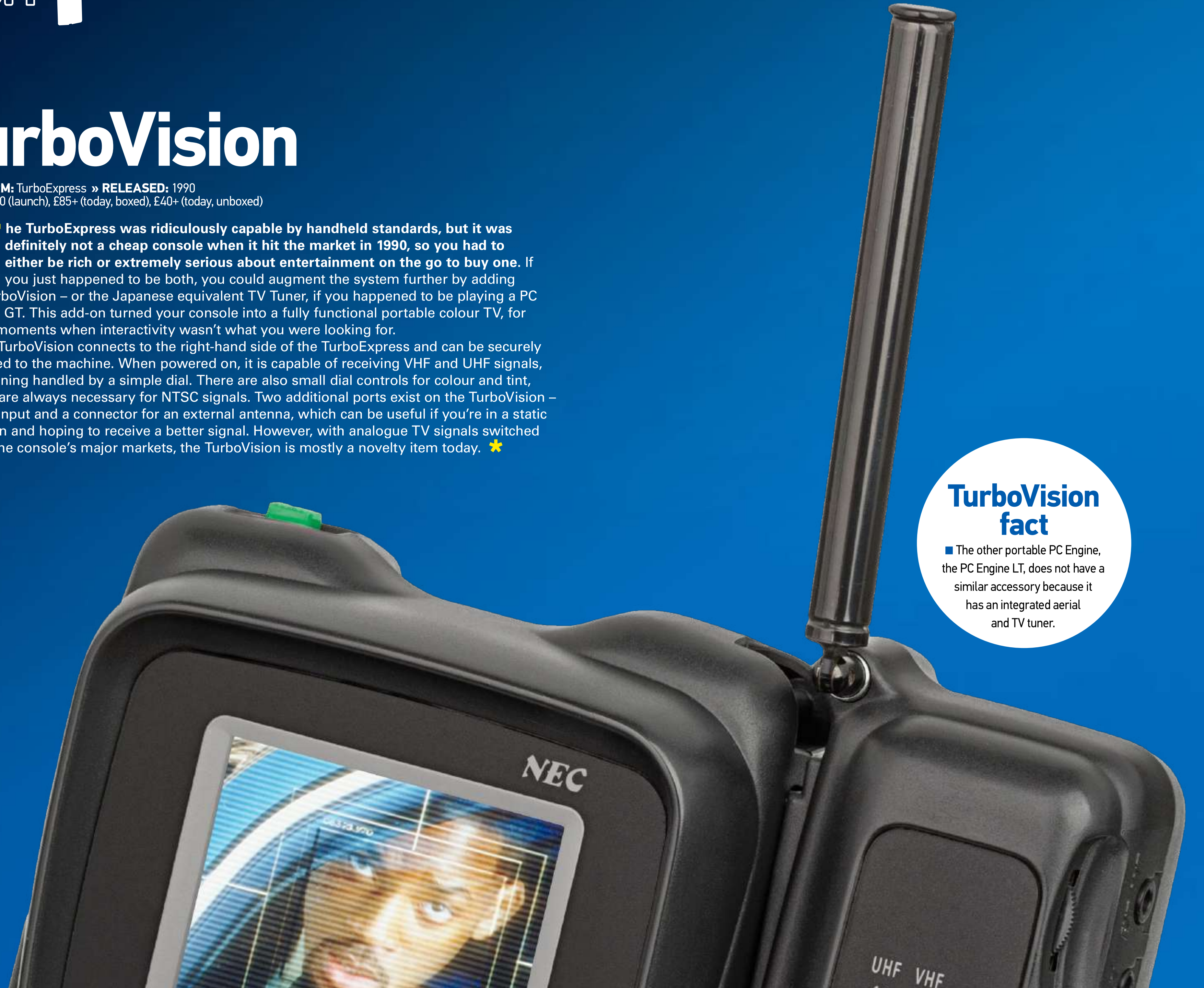
» PLATFORM: TurboExpress **» RELEASED:** 1990
» COST: $100 (launch), £85+ (today, boxed), £40+ (today, unboxed)

The TurboExpress was ridiculously capable by handheld standards, but it was definitely not a cheap console when it hit the market in 1990, so you had to either be rich or extremely serious about entertainment on the go to buy one. If you just happened to be both, you could augment the system further by adding the TurboVision – or the Japanese equivalent TV Tuner, if you happened to be playing a PC Engine GT. This add-on turned your console into a fully functional portable colour TV, for those moments when interactivity wasn't what you were looking for.

The TurboVision connects to the right-hand side of the TurboExpress and can be securely fastened to the machine. When powered on, it is capable of receiving VHF and UHF signals, with tuning handled by a simple dial. There are also small dial controls for colour and tint, which are always necessary for NTSC signals. Two additional ports exist on the TurboVision – an AV input and a connector for an external antenna, which can be useful if you're in a static location and hoping to receive a better signal. However, with analogue TV signals switched off in the console's major markets, the TurboVision is mostly a novelty item today. *

TurboVision fact

- The other portable PC Engine, the PC Engine LT, does not have a similar accessory because it has an integrated aerial and TV tuner.



TurboExpress
TURBO 16 GRAFX
Select
Run
TUNING
14
30
50
69
CH
2
4
6
7
10
13
CH
TurboVision

Enemy Of The State © Walt Disney Studios

ESSENTIAL GAME

AV CABLE

An analogue TV tuner is not much use in this modern world of digital TV signals. Fortunately, your TurboVision is not entirely useless, as you can plug an AV cable into the appropriate 3.5mm jack to use your TurboExpress as a monitor for any standard definition NTSC video source. If given the choice, we'd like to hook up a DVD player and watch *Enemy Of The State*. If you haven't seen it, the film stars the TurboExpress as a key piece of evidence in a major government conspiracy, with the Oscar-winning actors Gene Hackman and Will Smith performing admirably in their supporting roles.

SUPPLIED BY
EVAN AMOS

THE MAKING OF

KRULL

ON A PLANET OUTSIDE KNOWN TIME AND SPACE, WE ASK PROGRAMMER MATT HOUSEHOLDER, ARTIST JEFF LEE AND AUDIO ENGINEER DAVID THIEL ABOUT THEIR VIDEOGAME VERSION OF THE 'SO BAD IT'S GOOD' MOVIE, KRULL

WORDS BY PAUL DRURY

DEVELOPER HIGHLIGHTS

OLI-BOO-CHU
SYSTEM: ARCADE
YEAR: 1981

CALIFORNIA GAMES
SYSTEM: C64, VARIOUS
YEAR: 1987

DIABLO II (PICTURED)
SYSTEM: PC, MAC
YEAR: 2000

KRULL
CREDITS 1

IN THE KNOW

- **PUBLISHER:** GOTTLIEB
- **DEVELOPER:** GOTTLIEB
- **RELEASED:** 1983
- **PLATFORM:** ARCADE
- **GENRE:** TWIN-STICK SHOOTER

At Retro Gamer, we go the extra mile. In preparation for this piece, we watched Columbia Pictures 1983 fantasy epic *Krull* for the first time. [I'd already seen it - Ed] It's two hours of our life we're never getting back. We wonder what programmer and game designer Matt Householder made of *Krull* on initial viewing.

"I've never actually seen it," Matt replies. "I would have gone to the premiere but I wasn't invited. Many years later I saw it was on TV and watched… for five minutes."

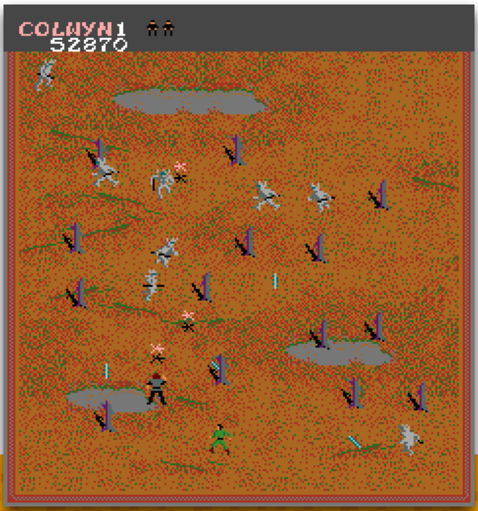
It's hardly a ringing endorsement of the source material Matt was handed for his own premiere as an arcade game creator at Gottlieb. He had previously had a bit part in the coin-op industry at GDI, a company better known for producing slot machines, which was trying to find a way into the burgeoning videogame business. Matt worked on an unreleased video-poker machine and also helped tune *Oli-Boo-Chu*, a strange maze game licensed from Irem in Japan, for the North American market, but after less than a year at GDI, he and his colleague Chris Krubel saw Gottlieb was hiring.

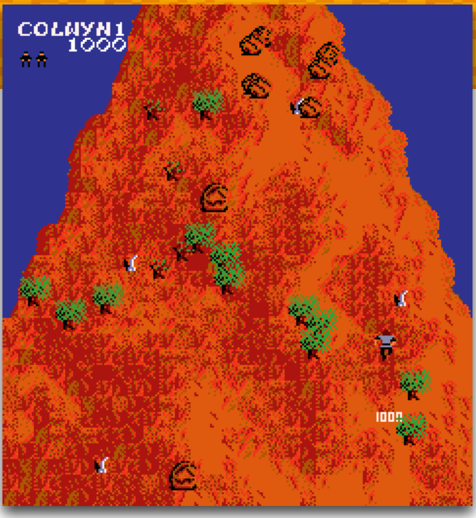
"Chris and I were interviewed together by Ron Waxman, the VP of engineering," recalls Matt. "Ron was friendly and smart, but also very demanding and somewhat intimidating. He made it clear that if we were hired, our job was to produce a game based on this movie, *Krull*, and it had to be done for a deadline – before the movie came out. He was also clear that if we didn't do it right and do it quickly, we'd be out of there. Fired."

No pressure, then. Not only were the new recruits handling a licence based on a $50 million movie property, financed by Gottlieb's parent company, Columbia Pictures, their jobs were on the line if they didn't deliver. As the film was still in production, with most filming taking place at Pinewood Studios in England, all the pair were handed was a script. "We weren't even told if it was the final script," says Matt. "It was hand-bound but it did have the basic story outline. I remember thinking that at least there was plenty of stuff in it, but as for how much we could actually do… mmm, not a lot. It became an analysis project, identifying elements of the story which might lend themselves to an action game."

Matt got to work and after less than a month, he had come up with a list of potential level themes.

» [Arcade] Matt pitched this screen as '*Robotron* in a swamp' in his original design document, which is a pretty accurate description.





» [Arcade] Stay too long on the opening mountain level and the boulders will not only increase in speed, Matt coded it so they start aiming right for you.

A compulsive collector, he still has that list, dated 6 June 1982, and scanning it today makes for fascinating reading. Amongst the 14 possibilities are Boulder Dodge, Hexagon and Battle With Beast, which made the final cut, but we wonder what the plan was for Widow Of The Web and Fire Mares which didn't? "Yeah, what could the web have been," he chuckles, "and they might have cut that scene from the movie anyway! I only had the script and I was trying to edit the list down to four or five levels that could share a lot of artistic elements and work on a 2D playfield. For Fire Mares, I could have maybe incorporated *Joust*, and Hexagon was a direct rip-off from *Tron*."

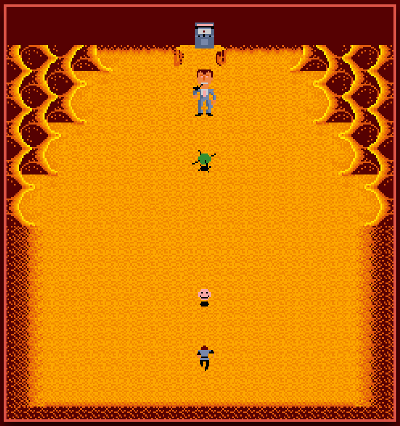
> "WE WERE HIRED TO PRODUCE A GAME BASED ON THIS MOVIE, KRULL, AND IT HAD TO BE DONE BEFORE THE MOVIE CAME OUT… OR WE'D BE FIRED"
> **MATT HOUSEHOLDER**

A keen arcade gamer, Matt unashamedly acknowledges he drew heavily from the titles which had been gobbling up his quarters before he arrived at Gottlieb. His favourite game was also his biggest influence: *Robotron: 2048*. After helping Prince Colwyn collect the pieces of his trusty glaive (a cross between a shuriken and a sharp-edged frisbee) on level one, the following four stages feature our hero flinging his weapon at encroaching enemy hordes in a similar vein to Eugene Jarvis and Larry De Mar's seminal blaster. The *Krull* cabinet also has two joysticks like *Robotron*, though Matt may have been channelling a less obvious inspiration. "It all depends on how much you believe in mystical connections over time and space," he says, cryptically. "Philip K Dick died just before I joined Gottlieb, and in his novel, *Do Androids Dream of Electric Sheep?*, he describes the religion of Mercerism, where worshippers stand in front of a device with a video screen, grab its two handles and have the empathetic experience of climbing a hill while being pelted with rocks. Maybe there was a subconscious connection…"

With the levels and control setup decided upon, Matt and Chris got to work. Installed in adjacent cubicles in the Gottlieb offices, they would ▶

WHO IS BOB DOBBS?

THE STORY BEHIND KRAWL

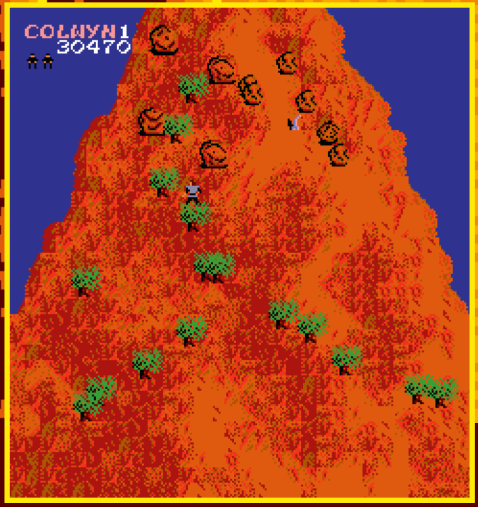


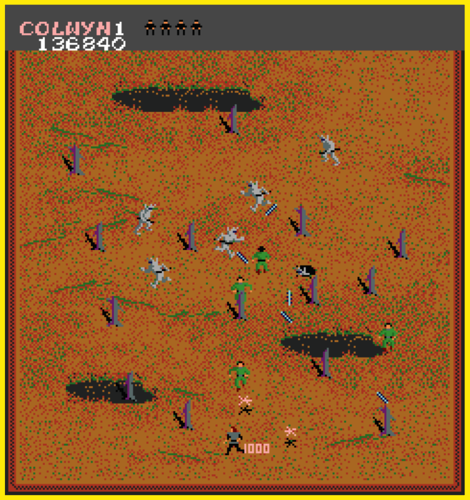
» [Arcade] The final showdown in *Krawl*, with Bob Dobbs as the Beast and your glaive a smiley face.

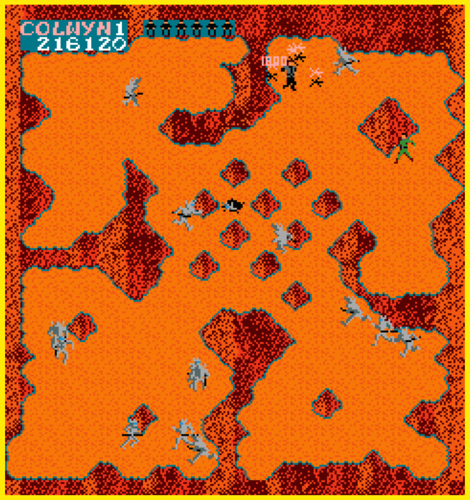
■ Matt isn't quite sure why Chris Brewer, artist, technician and programmer best known for his work on *MACH 3*, decided to create an alternative version of *Krull*, but it certainly raised a smile in the Gottlieb offices. In *Krawl*, the boulders on the first level became televisions, Prince Colwyn's army now consisted of Girl Guides and Princess Lyssa is transformed into a coin-op cabinet. "It isn't a *Krull* cab," Matt assures us, "to avoid the horror of infinite recursion. The Beast became Bob Dobbs, a deity of the Church Of The SubGenius, a parody religion that was growing fast in the early Eighties. My wife, Candi, was an early member. I actually put a 16x16 pixel image of Bob in the Atari 520ST operating system font a few years later." Matt's co-creator of *Krull*, Chris Krubel, who sadly passed away in 2007, was also a member of the 'church'.

Gottlieb
KR

» Programmer Matt Householder with his original movie poster







A JOURNEY THROUGH

MOUNTAIN

Our hero must dodge boulders and collect the scattered pieces of the glaive, his frantic legwork suggesting he began the day with several espressos. "I used highlighting, shading and shadows to give the boulders a solid look," Jeff says. "Back then I heavily relied on Eadweard Muybridge's classic photographic motion masterpieces, as well as Preston Blair's cartooning books. And no, I was not happy with the leg animation."

SWAMP

Prince Colwyn gets his feet muddy rounding up his army stuck in a swamp, whilst dispatching evil Slayers with the glaive he assembled in the previous level. "I must have been sent some photos [from the film] for reference but I don't recall particulars," says Jeff. "Matt must have told me what he needed for this screen. I never got to visit the set because it was filmed in England. That would have been an awesome trip."

FORTRESS

The rocky terrain on this level means avoiding the Slayer's deadly laser fire is especially tricky, as is getting a clean shot at them with your glaive. Jeff: "The glaive is the only source item in my archive which I have. It is a detailed drawing. Whether it was copied from the actual prop or is the sketch from which the prop was made, I don't know. As for the background, I rather enjoyed the challenge of making do with a 128-character set."

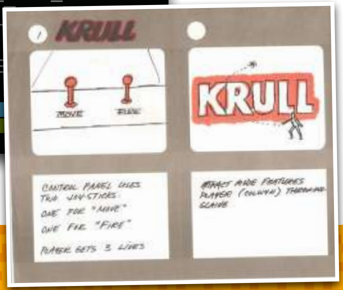
typically meet on a Monday to agree on goals for the week, program separately, save their work on floppy disks and meet occasionally to merge their code and check for bugs. The collaboration worked exceptionally well and Matt cannot recall any clashes with Chris, though the successful partnership was almost broken up by manager Ron Waxman, who was used to assigning a single coder to a project. "Ron would stand behind our backs while we were programming and he asked me, more than once, 'Matt, how come it takes two programmers to do one game?' This would be in the autumn of 1982, when we were about halfway through *Krull* and things were going well, so he wanted to split us up and get one of us to do another game. Then, one day it came to me and I said, 'Well, Ron, I do the good guys and Chris does the bad guys.' He stopped asking me after that."

It was a neat excuse and allowed the pair to continue to bounce ideas off each other, resulting in some clever features in the game. The Slayers you encounter on several levels have subtle AI routines, meaning they work as a team to surround and attack Prince Colwyn, and the torrent of boulders on the opening screen are displayed in pseudo-3D, so they appear to overlap each other. "I used a data structure called a doubly-linked circular list with a null header to sort the sprites and speed up collision detection," says Matt, proudly. We nod in the same way we do when a mechanic looks under our car bonnet and says, 'It's the big end gone.' This ingenious bit of coding did allow a unique gameplay feature to emerge, as Matt explains.

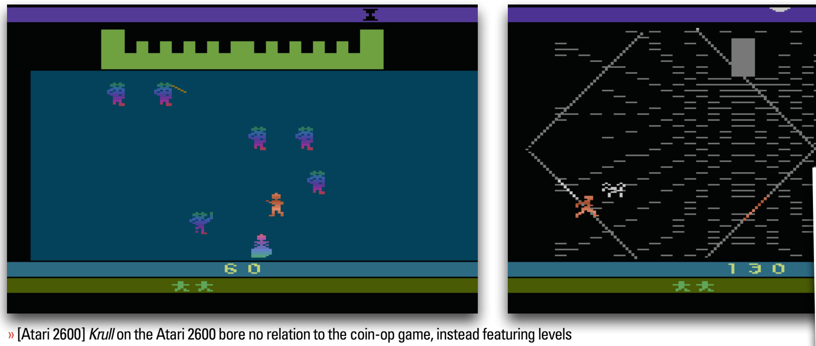
"IF KRULL HAD BEEN A HIT AT THE BOX OFFICE, MAYBE IT WOULD HAVE HELPED OUR GAME BUT EVEN A HIT MOVIE WASN'T GOING TO REINVIGORATE THE WHOLE COIN-OP INDUSTRY"
MATT HOUSEHOLDER

"The longer you stay on that level, the faster the boulders roll… and they start aiming for you! I realised a new player could get hit by boulders, lose all their lives and die with no glaive pieces… so their score is zero. That's terrible! No one wants that – they'll never play it again. In my software design, sprites would be displayed properly sorted in front of one another, allowing you to run down the hill with just your character's head overlapping the bottom of a boulder. You could surf down the mountain in front of a rock, and for every frame you were putting yourself in danger, I'd give the player some points. Now it became a challenge of how long you could keep doing that, pushing up your score, till it got so fast you had to grab the last glaive piece."

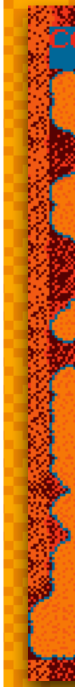
Chris immediately dubbed these 'macho points', your reward for living dangerously on the mountain, and you can see echoes of it in shoot-'em-ups like *Psyvariar* and driving games like *Burnout*, which reward you for near misses. Gottlieb's resident sound engineer, David Thiel, added in an audio cue, a distinctive 'dum, der der dum, der der dum', so players knew their daring recklessness was racking up the points. "*Krull* was the least abstract of the games I had worked on up to then," recalls David. "I remember spending an entire week writing tight loops of code to sound like a foot going in and out of a swamp! I had received a cassette with a couple of the James Horner music cues [from the film] which I transcribed and played as reward fanfares. For the boulders rolling down the mountain, I used my expanded explosion algorithm from *Mad Planets* to create an ever-expanding roar of imminent threat. Actually, *Krull* was the first project where I used a sound sample recorded from a microphone.

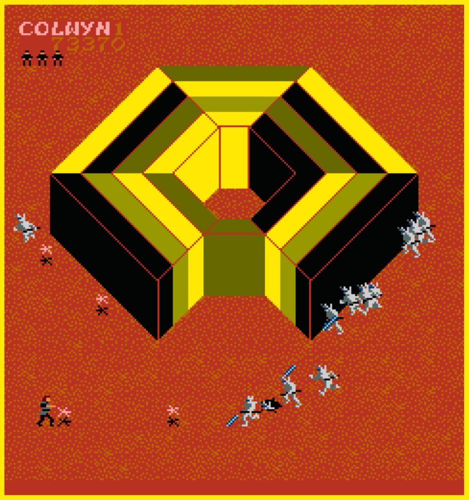

1
KRULL
MOVE
FIRE
KRULL
CONTROL PANEL USES TWO JOYSTICKS: ONE FOR "MOVE" ONE FOR "FIRE" PLAYER GETS 3 LIVES
ATTRACT MODE FEATURES PLAYER (COLWYN) THROWING GLAIVE

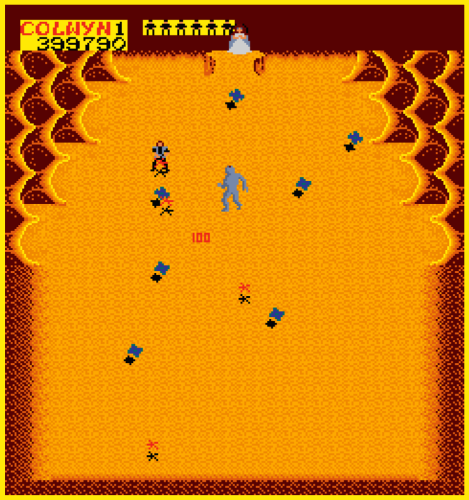
» From Matt's early storyboarding of *Krull*, showing the control set up and attract screen.

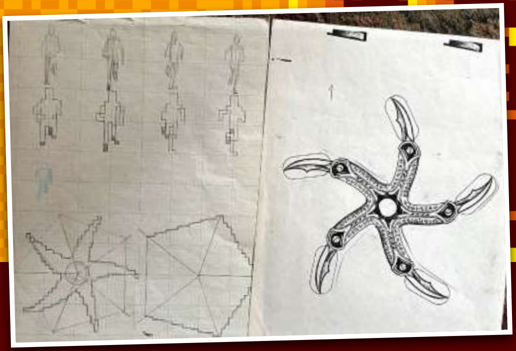


» [Atari 2600] *Krull* on the Atari 2600 bore no relation to the coin-op game, instead featuring levels based on the Widow Of The Web, the Fire Mares and the interrupted wedding scenes from the film.









» Jeff Lee's initial sketch of the glaive alongside his pixelated in-game version.

KRULL

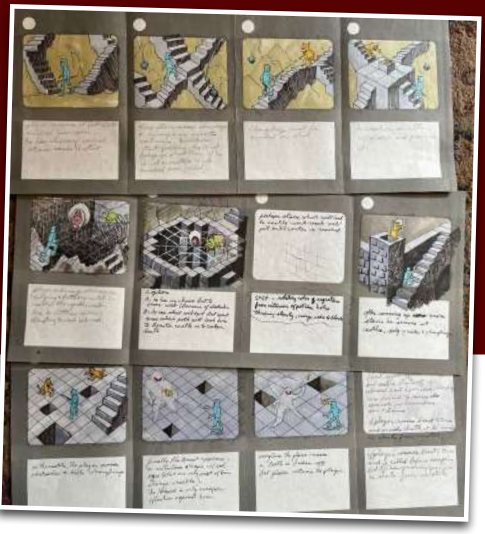
ARTIST JEFF LEE TALKS US THROUGH HIS PIXELATED TAKE ON THE FANTASY EPIC

HEXAGON

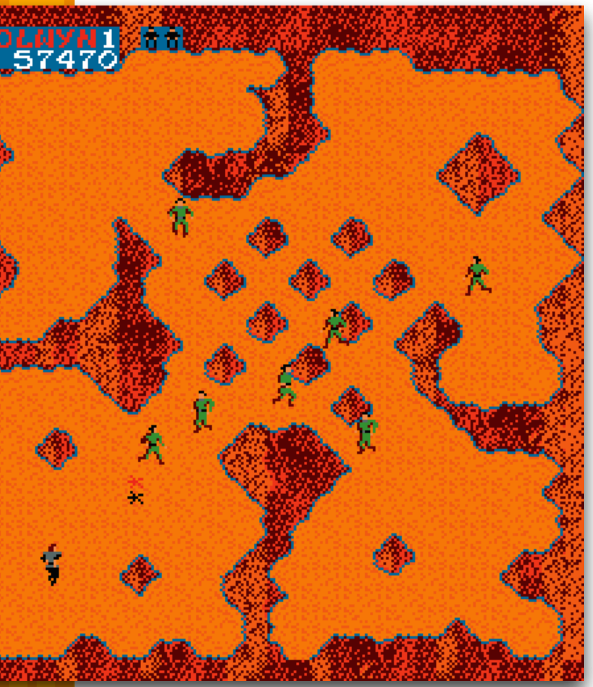
■ If you've ever played *Tron*, this scene will feel familiar. Blasting the rotating layers of the hexagon when they turn black to gain entry to the final battle with the Beast is reminiscent of the MCP cone stage, though it is on a grander scale here and the changing colour palette gives it a strange, hypnotic quality. Jeff says, "I like effects of that sort and I like this level. It kind of reminds me of my hippie college days."

BEAST

■ The game's finale is something of an anti-climax, as the Beast lollops round the screen before a few glaive hits defeat him. "I had a limit of 256 foreground sprites in the whole game and so the animation cycles had to be truncated." Jeff explains. "I only had two sprites for each frame for the Beast. I never felt that my sprites for the game were my best work but then I saw the film in a theatre… and was not wowed."



» Jeff Lee's original storyboard for the game featured the battle with the Beast, which made the cut, and Widow Of The Web, which didn't.



» [Arcade] The approach to the Fortress is a tricky level, given the awkward terrain and proliferation of laser-firing Slayers.

When the Slayers get hit, that's me groaning." Gottlieb also employed an in-house artist, Jeff Lee, [see boxout for his Director's Commentary], who created the impressive backdrops to each level, the detailed if slightly overactive character animations and helped with such cinematic flourishes as the swirling stars which announce each new scene. However, when it came to the final battle with the Beast, the supposedly terrifying creature looked more like a sulky, emaciated gorilla. "Ah, the Beast," sighs Matt. "We didn't know how big it was going to be in the movie, so we made him twice the size of Colwyn. He was restrained in his little sprite box, so couldn't run properly or be vigorous. That was the hardware, not Jeff. It was one of the last things we did, as the finale, and there was a ton of pressure on us to get the game out before the movie…"

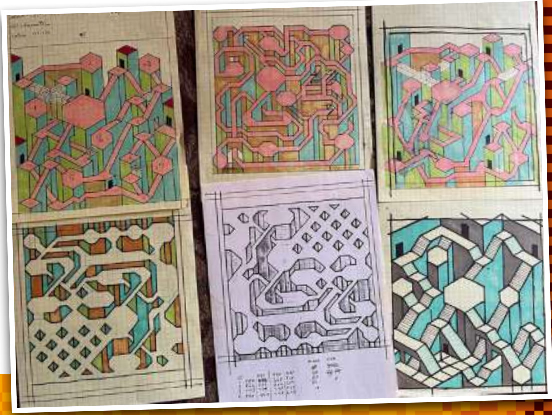
The team did indeed deliver the completed game in March 1983, just nine months after Matt had produced that initial list of level ideas, allowing it to go out on test and into production before the film hit the big screen in the summer. Matt and Chris kept their jobs, though received no bonus, and the critical and commercial panning the movie received meant the audience for their coin-op debut was limited. "If *Krull* had been a hit at the box office, maybe it would have helped," muses Matt, "but the coin-op business was fading rapidly at that point. Even a hit movie wasn't going to reinvigorate a whole industry. Our game was out before the film and it's been proven there's a synergy if you launch a film and game together. That helped *Tron*, for example… and I think our game is better than *Tron*! It has five sub-games, so it's one better."

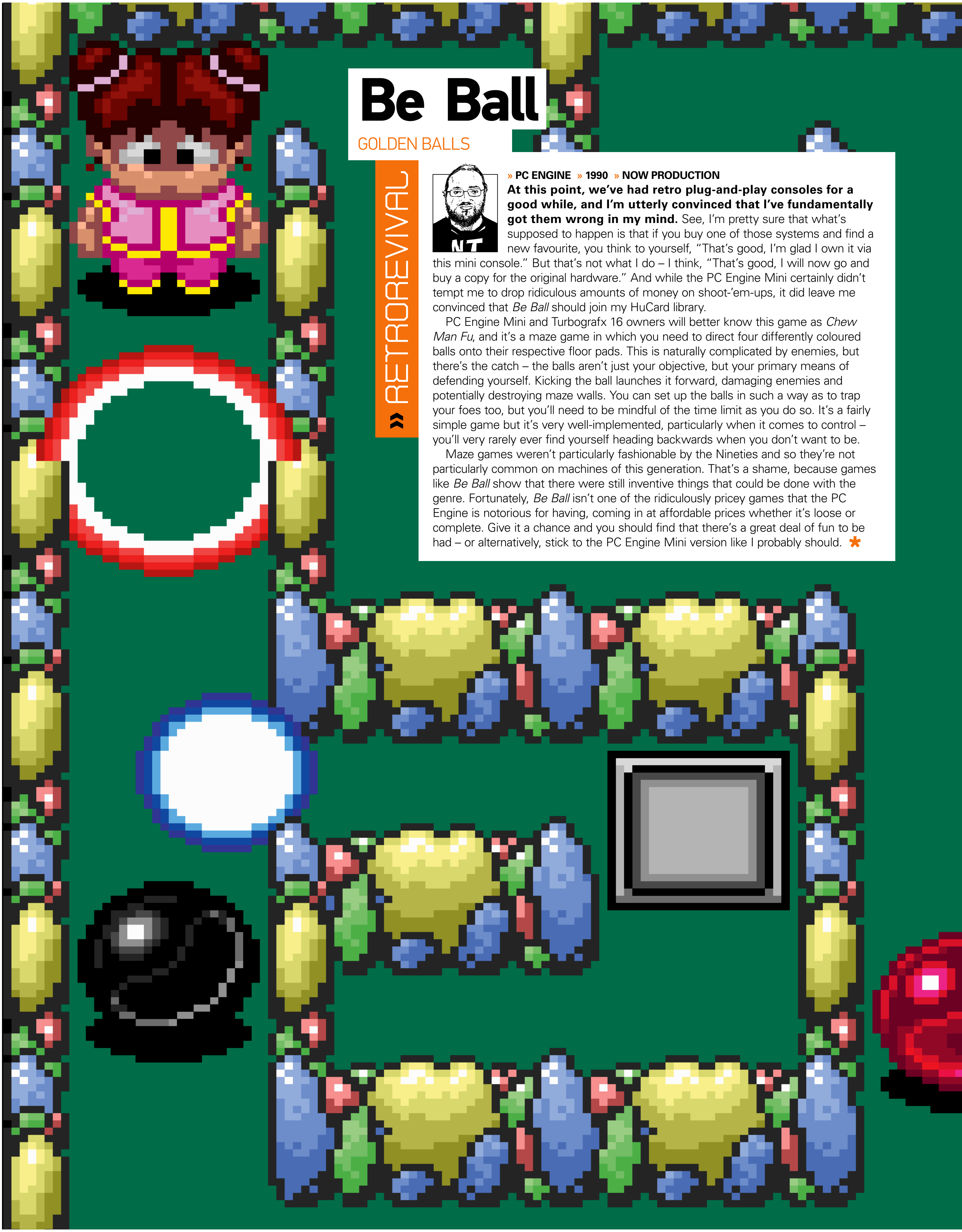
We appreciate Matt's Spinal Tap logic and on the subject of pastiches, his colleague Chris Brewer took it upon himself to create *Krawl* back in 1983, a version of the game which turned the Slayers into briefcase-carrying businessmen and the glaive into a smiley face (see boxout Who Is Bob Dobbs?). When Matt left Gottlieb for Atari, he took the *Krawl* EPROMs with him and having sat in his basement for almost 40 years, it looks like the game will finally get a public showing at Chicago's Galloping Ghost Arcade this year. It's rather apt that the game will live on in joke form, as the film has gathered something of a cult following, mainly due to the comedy value, particularly to a British audience, of seeing *Grange Hill*'s Tucker Jenkins go full man crush on Prince Colwyn and *Carry On* stalwart Bernard Bresslaw as a one-eyed giant. Will Matt finally commit to watching the film his arcade debut was based on?

"*Krull* has never been at the top of my mind but I will now promise to watch the whole thing if you're writing a whole article about it," he replies. We will ask him about it when we invite him to be a Desert Island Disks' castaway next year. If he's still talking to us. *

Thanks to Matt and Jeff for use of original photos and artwork and Martyn Carroll for additional help.

» Jeff Lee designed various maze levels, which didn't make the final game. They remind us of Atari's *Crystal Castles*.





Be Ball

GOLDEN BALLS

» PC ENGINE » 1990 » NOW PRODUCTION

At this point, we've had retro plug-and-play consoles for a good while, and I'm utterly convinced that I've fundamentally got them wrong in my mind. See, I'm pretty sure that what's supposed to happen is that if you buy one of those systems and find a new favourite, you think to yourself, "That's good, I'm glad I own it via this mini console." But that's not what I do – I think, "That's good, I will now go and buy a copy for the original hardware." And while the PC Engine Mini certainly didn't tempt me to drop ridiculous amounts of money on shoot-'em-ups, it did leave me convinced that *Be Ball* should join my HuCard library.

PC Engine Mini and Turbografx 16 owners will better know this game as *Chew Man Fu*, and it's a maze game in which you need to direct four differently coloured balls onto their respective floor pads. This is naturally complicated by enemies, but there's the catch – the balls aren't just your objective, but your primary means of defending yourself. Kicking the ball launches it forward, damaging enemies and potentially destroying maze walls. You can set up the balls in such a way as to trap your foes too, but you'll need to be mindful of the time limit as you do so. It's a fairly simple game but it's very well-implemented, particularly when it comes to control – you'll very rarely ever find yourself heading backwards when you don't want to be.

Maze games weren't particularly fashionable by the Nineties and so they're not particularly common on machines of this generation. That's a shame, because games like *Be Ball* show that there were still inventive things that could be done with the genre. Fortunately, *Be Ball* isn't one of the ridiculously pricey games that the PC Engine is notorious for having, coming in at affordable prices whether it's loose or complete. Give it a chance and you should find that there's a great deal of fun to be had – or alternatively, stick to the PC Engine Mini version like I probably should. ✱

THE MAKING OF

Super Cars II

MAGNETIC FIELDS' SEQUEL BLASTED ON TO THE AMIGA AND RACED TO THE HEARTS OF MANY A PLAYER SO RETRO GAMER THOUGHT IT WAS TIME TO PULL UP ALONGSIDE SHAUN SOUTHERN AND ANDREW MORRIS TO SEE HOW IT BECAME A WINNING GAME

WORDS BY DAVID CROOKES

IN THE KNOW

- » **PUBLISHER:** GREMLIN GRAPHICS
- » **DEVELOPER:** MAGNETIC FIELDS
- » **RELEASED:** 1991
- » **PLATFORM:** AMIGA, ATARI ST, DOS
- » **GENRE:** RACING

» Shaun Southern created a number of hits for Magnetic Fields and now does tools and tech for Playdemic.

» Andrew Morris no longer makes videogames and currently works in property.

DEVELOPER HIGHLIGHTS

KIKSTART: OFF-ROAD SIMULATOR
SYSTEM: ATARI 8-BIT, VARIOUS
YEAR: 1985

LOTUS ESPRIT TURBO CHALLENGE (PICTURED)
SYSTEM: AMIGA, VARIOUS
YEAR: 1990

NETWORK Q RAC RALLY CHAMPIONSHIP
SYSTEM: DOS
YEAR: 1996

If you were a fan of top-down racers around the time when the world waved goodbye to the Eighties and welcomed the Nineties, then you were in luck. Developers knocked out the likes of *Badlands*, *Super Off Road*, *Hot Rod*, *Nitro* and *Micro Machines* – with Gremlin Graphics adding *Super Cars* to that list in 1990.

In doing so, some devs were looking in their rear-view mirror at iconic titles released a few years earlier, most notably Atari's *Super Sprint*. "It was definitely the inspiration for *Super Cars*," says Shaun Southern, programming director of Magnetic Fields. "I used to go to the arcades in Rhyl a lot and I remember a huge imposing machine with lots of steering wheels on it."

Super Cars was a refreshing spin on the genre: *Super Sprint* with weapons, in a nutshell. It wasn't complex nor realistic but the cars handled well, vehicles could be customised, fixed and purchased, and the nine tracks were short yet sweetly designed so that it moved along at a fair old pace. The joy of handbrake turning on a 90-degree bend was a boy racer dream and the game oozed personality. "We were pleased with *Super Cars* when it came out," says Shaun. "The handling and playability were always paramount but the style of the graphics and the screens in between the races really gave it a lot of depth."

> "THE TRACKS WERE ABOUT THE SAME WIDTH BUT THERE WERE FEWER STRAIGHTS AND MORE SURPRISES"
>
> **SHAUN SOUTHERN**

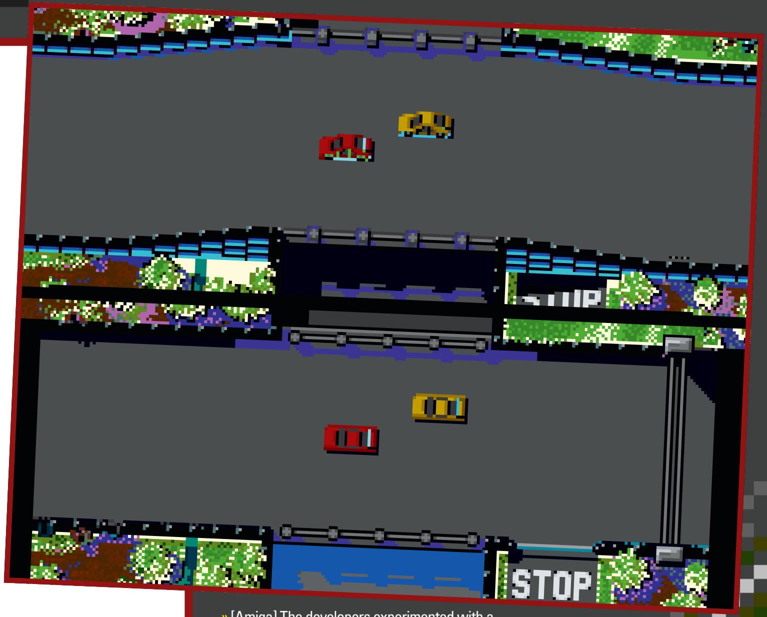
Those screens included cheering crowds as you scanned details of your position, maximum speed and prize. There were also car stats and conversations with a smarmy car salesman. "It was designed to be bright and arcadey with a cinematic element to the supporting screens," says Andrew Morris, *Super Cars II*'s artist and designer. "But, while *Super Sprint* was probably the closest thing at the time, top-down racing games had been around for years and there were influences from the genre generally. I also wanted more than a racer so there were other games you probably would not think inspired me such as *Ghostbusters* on the C64 which let you purchase items. I liked the battle/customisation idea which I hadn't seen in that style of game before."

After Magnetic Fields finished *Super Cars*, the team went on to create another iconic game, *Lotus Esprit Turbo Challenge*. But since *Super Cars* had sold well and was critically well-received, it was inevitable that the team would come back to their top-down racer. What's more, the developers also had a clear idea of how they believed the sequel should look and feel. "The intention was to open up the game much more, particularly with the incidental and transitional screens so that it had the appearance of a 'big world'", Andrew explains. "I just wanted it to become much bigger and we had so many ideas that we couldn't use them all."

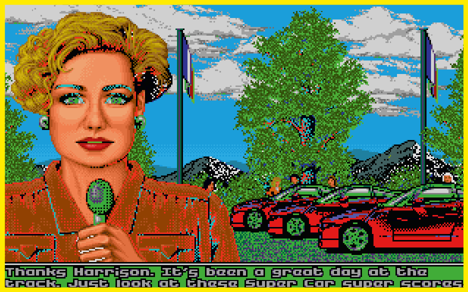
The desire to add more ideas was shared by Shaun so the pair got on with the task of expanding upon the original game. Unlike *Super Cars*, the sequel was only being earmarked for the 16-bits – Amiga and Atari ST, naturally – but while that meant fans on the Amstrad CPC, Commodore 64 and ZX Spectrum were going to be disappointed, it was a sign that the developer was driving forward into a 16-bit-only era. It also gave the team the freedom to push their ideas with less compromise than before.

One of the first things that needed to be considered were the number of tracks and how they would be designed. This time around, the developers decided to go for 21 courses spread across three levels of difficulty. "A big ask given the time that we had to develop the game," Shaun says. The pair also decided the sequel should have tighter turns than before to pose more of a challenge.

"I think the tracks were about the same width but there were fewer straights and more surprises around every corner," says Shaun. As before, the tracks continued to scroll rather than remain ▶

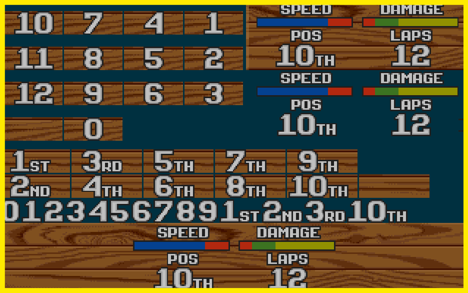


» [Amiga] The developers experimented with a horizontal split for the two-player mode but ditched it in favour of vertical.



Thanks Harrison. It's been a great day at the track. Just look at these Super Car super scores

» [Amiga] All of the artwork (this is a work in progress) was created in Deluxe Paint on the Amiga by the talented artist Andrew Morris.

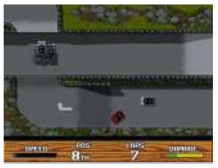


» [Amiga] These are the graphics for the panel, showing the player position, speed, car damage and number of laps left.

CONVERSION CAPERS

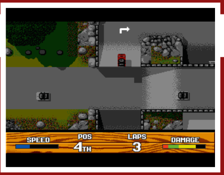
HOW EACH VERSION COMPARES

AMIGA



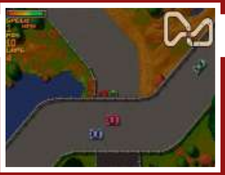
■ *Super Cars II* was developed on the Amiga and it was a chance for the developers to include ideas that didn't make it into the original. As well as introducing a two-player mode there were more tracks (each more complex than the original set), a greater emphasis on weapons and improved competitor driver AI.

ATARI ST



■ According to co-developer Andrew Morris, "The ST was always an irrelevant afterthought – we never compromised the Amiga version, we downgraded it later for the ST." This version had poorer sound as well as less-detailed and noticeably less-colourful graphics yet the gameplay remained exactly the same.

DOS



■ Released in 1996, *Super Cars International*, as it was called, "Was kind of *Super Cars 2.5* and the best version," Andrew says. It boasted 256-colour VGA graphics, textured roads and a new soundtrack, as well as a more responsive car and the ability to choose the number of laps in a race.

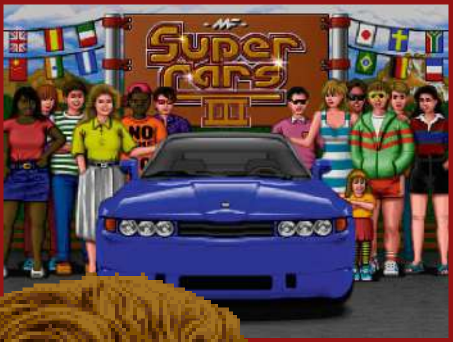
DRIVING AHEAD

COULD THERE BE A SUPER CARS III?

A third *Super Cars* game was never made. The nearest the team got was *Super Cars International* on the PC which made use of the exact same tracks in *Super Cars II*, albeit with a heap of improvements. "We managed to improve the car handling to how I'd originally envisaged it – smooth flowing and realistic," says Andrew Morris. "I also wanted to open up the multiplayer aspect so, in the absence of the internet, I introduced virtual drivers with personalities." Yet Andrew is frustrated that the racing game came to a halt right there.

"There was so much more we could have done and we have talked about *Super Cars III* several times over the years because there is still a lot of enthusiasm for the games, more so now it's part of TheA500 console," he adds. To that end, he already has a stack of ideas and he enthusiastically lists them off one by one. "There would be a strong link with its heritage," he says. "With current technology, while it would still be a top-down racer, it would be in 3D and multiplayer online would be an obvious addition.

"I'd love to expand the in-game characters significantly, too, but bring back some of the old ones: there's lots of opportunities for fun there. The 'world' generally would expand, with the races remaining the focus but more going on elsewhere, like the missions. There would be different types of racing and environments. It would be a lot of fun developing it with the right people and I'd love to see it. It would probably take a motivated team and some funding to get it off the ground, though…"



» [PC] An unofficial homebrew *Super Cars III* was released for the PC in 2014 based on *Super Cars II* and *Supercars International*. Check it out at jotd.pagesperso-orange.fr/supercars3

static meaning players had to become familiar with the track if they had any great hope of mastering it. "Overtaking was always hard, too – especially when someone in front had mines to drop in your path," Shaun adds.

To produce the courses, the team drew up maps, a fair few of which included large gaps that forced gamers to leap across to the other side or else plummet and lose valuable time. "We made quite complicated coloured maps to steer the computer cars and to switch you from the top map to the bottom map so the jumps worked," says Shaun. "It worked pretty well but they were quite painful and time-consuming to create. The shadows were nice as well, not only when you drove into a shadow but also as you jumped over the gaps being offset. It just looked right so it sucked you into the world."

Due to the way the tracks were constructed, however, players often had to constantly manoeuvre their joystick while trying to stay ahead of the increased number of opposing cars. This task was made more tricky because power steering and other ways of improving the handling of the car were omitted this time around. It meant gamers had to make good use of their weapons and, luckily, the developers added a fair few more this time.

> "ANDREW TOOK A LOT OF PHOTOGRAPHS AND SPENT A LOT OF TIME GETTING THE GAME TO LOOK JUST RIGHT"
> **SHAUN SOUTHERN**

Having extra weapons at the player's disposal helped to set the sequel apart from its predecessor and there was a far greater emphasis on nobbling the other vehicles as you zoomed around the tracks. As well as being able to fire missiles from the front and back of the car, it was also possible to snap up mines, a battering ram and weapons that would home in on the opposition or rotate around your car while destroying anything that got close.

Your motor could also be protected by armour and you'd also be able to enjoy a turbo boost and an increase in your top speed. All of this made the game more than a simple racer and there was the bonus of a two-player mode too which had been missing in the original game.

"If you were playing against a friend, you would just spend all the time blowing each other up which was counterproductive really as one of you had to finish in the top five to continue," admits Shaun. "But it was still fun. We thought of plenty of missiles but you could only have two attached at once, right? I'd always use the mines and keep the cars behind at a safe distance."

While concentrating on annihilating the competition, gamers also had to contend with a few obstacles, most notably a train which could suddenly rush along its tracks and cause chaos and mayhem, potentially turning a race on its head. "I liked the train because, if you were headed over the tracks and you saw it, you knew what was about to happen," Shaun laughs. "Usually it was too late but sometimes you could skip to a stop in time. The gates that opened and closed were fun too, like something out of a platform game. I'm sure we had many more ideas which we were earmarking for a *Super Cars III*."

In many ways, the addition of a two-player mode was the icing on the cake, taking the game up a gear by nature of being able to pit your wits against a friend. Unlike *Lotus*, which split the screen horizontally, *Super Cars II* had the split vertically, straight down the centre of the screen and it worked very well, just as the developers felt it would.

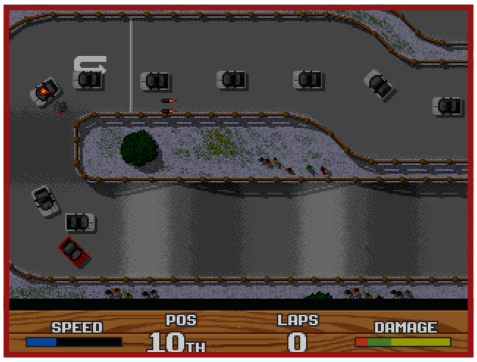
"With *Lotus*, the split-screen was natural, looking into the distance in 3D but the shape of the screen made it better to have a vertical split for *Super Cars II*, giving you more vision all round." Shaun explains. "I'm not sure there was any other choice really. I think it was technically harder to do, having to blank out the middle bit specially rather than do it all with hardware."

Another quirky aspect of the game was the method of control: you could press fire to accelerate or fire to brake. "I think I always used fire to accelerate, though I think the other method was an option because most people kept the accelerate button down all the time so it stopped them needing to hold the button," Shaun explains.

There was also pixel-perfect collision detection which meant players could narrowly scrape by an opposing car and potentially ease themselves to victory – so long as they could navigate the corners, anyway. Once races were complete, there was then the opportunity of improving a car and this is arguably where the game came into its own.

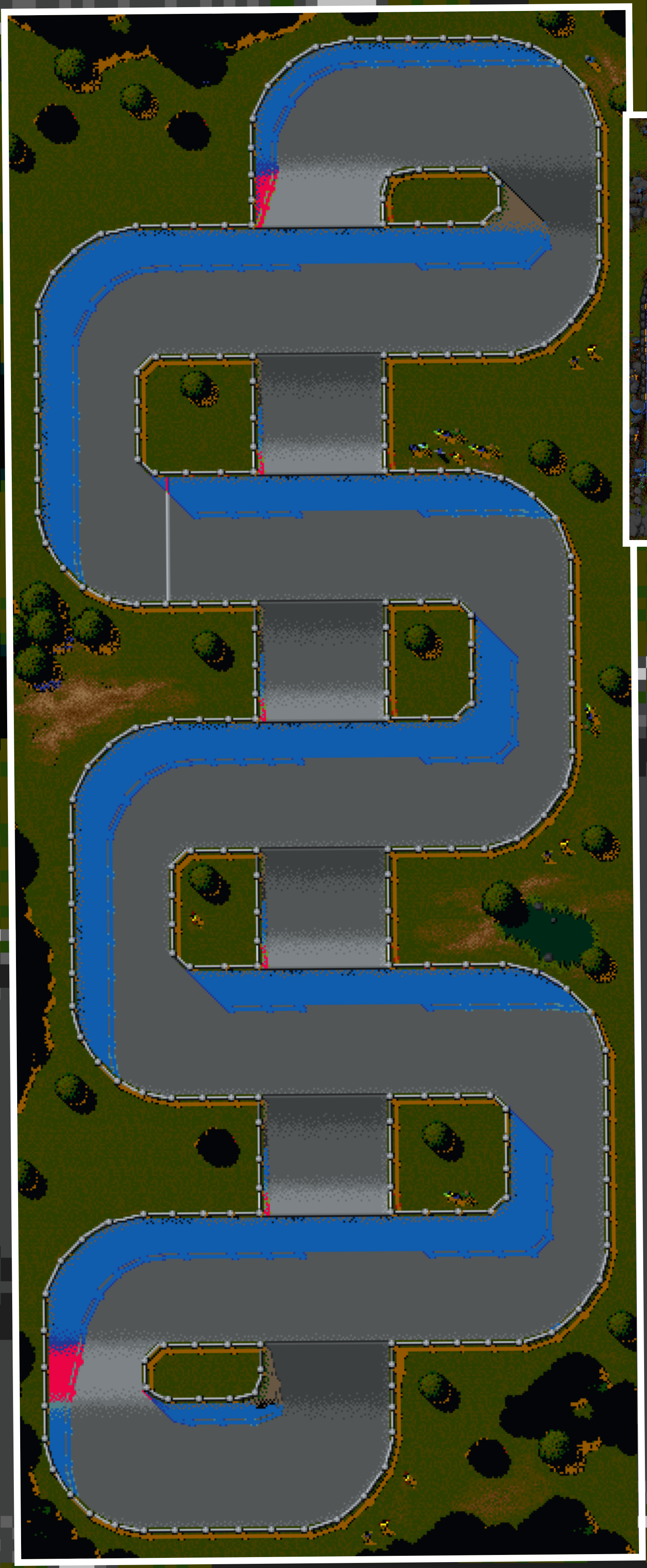
Players would amass money as they made their way through the game and it was possible to purchase parts and add to your weapon arsenal. Intriguingly, the prices would fluctuate and you could also sell weapons as well as buy them which gave gamers another way of earning cash.

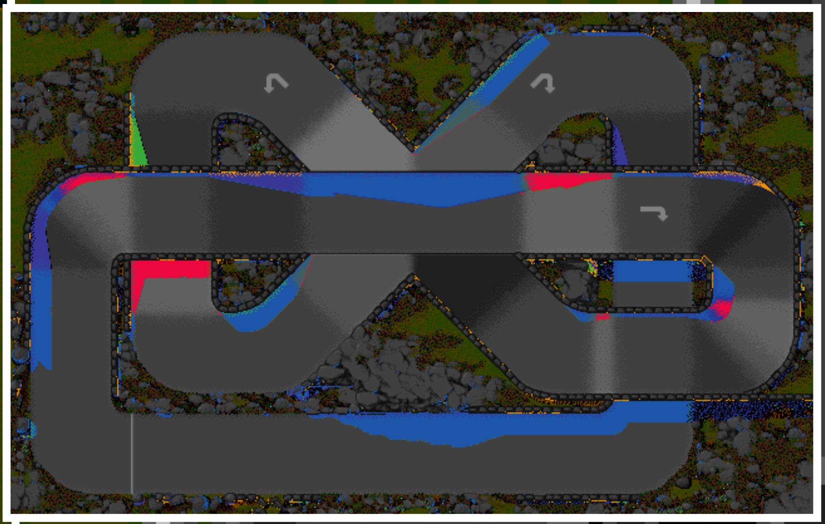
"The prices had a range which I guess over time you would learn, so you could speculate on buying a lot of missiles if they were cheap then selling them back when the price went up," says Shaun. "Until you knew the range of prices for each, it could seem random. But once you did you could make even more money and afford to use more missiles. Again, it was just a bit more depth so the longer you played it, the better you got."

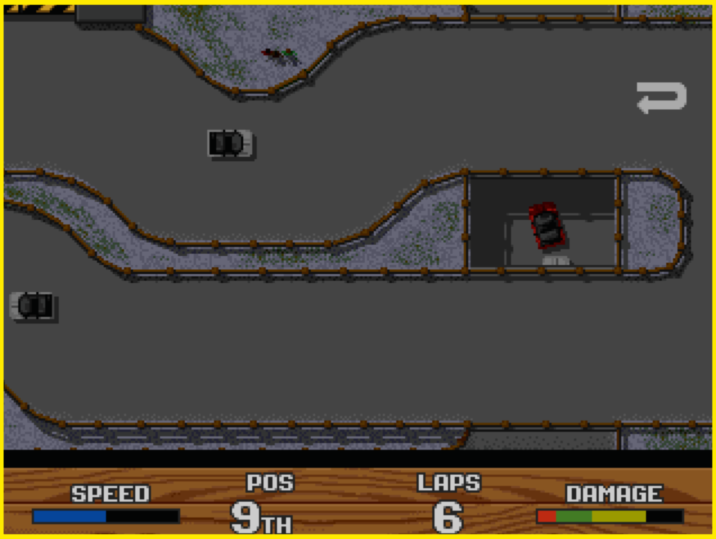


» [Amiga] It's all getting a bit heated here with some missiles being fired and a jostling for position.

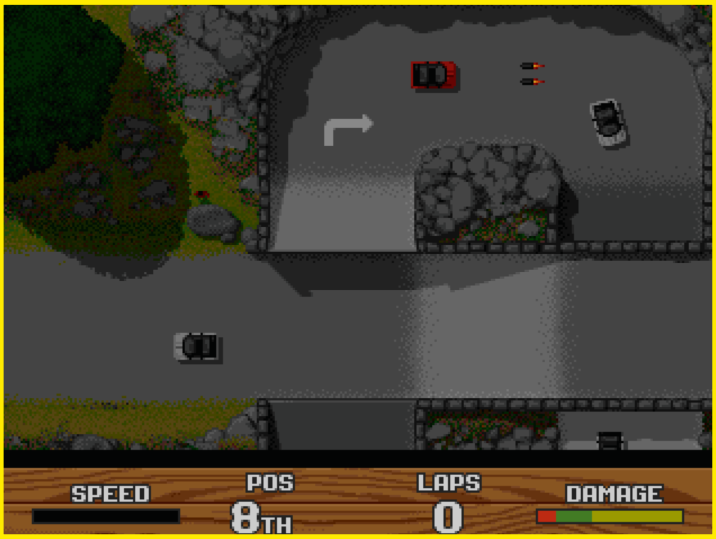
» [Amiga] Here (left and below) you can see two of *Super Cars II*'s tracks in all their glory. Both are tricky, so take care when navigating them.



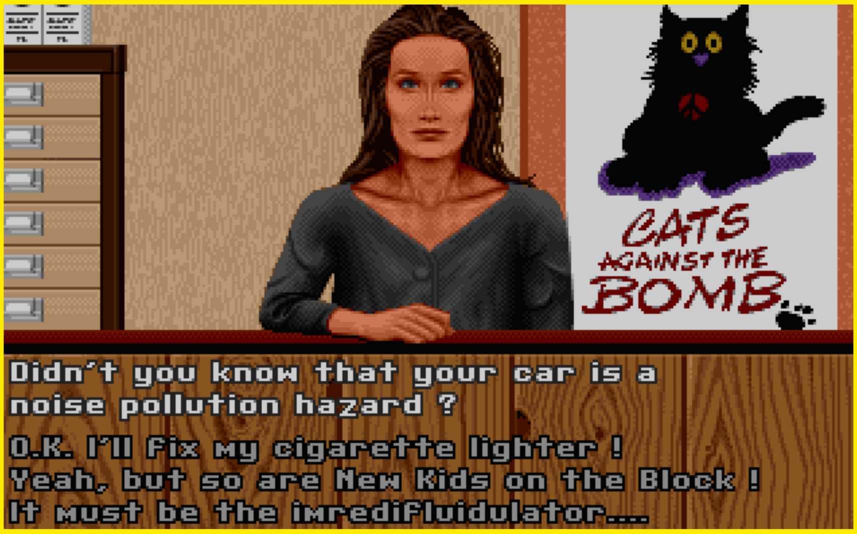



SPEED
POS
9TH
LAPS
6
DAMAGE

» [Amiga] Ah, there's our red car, just about to go through a double tunnel – don't get stuck!


SPEED
POS
8TH
LAPS
0
DAMAGE

» [Amiga] Where there are banked curves, cars can enjoy fast cornering.



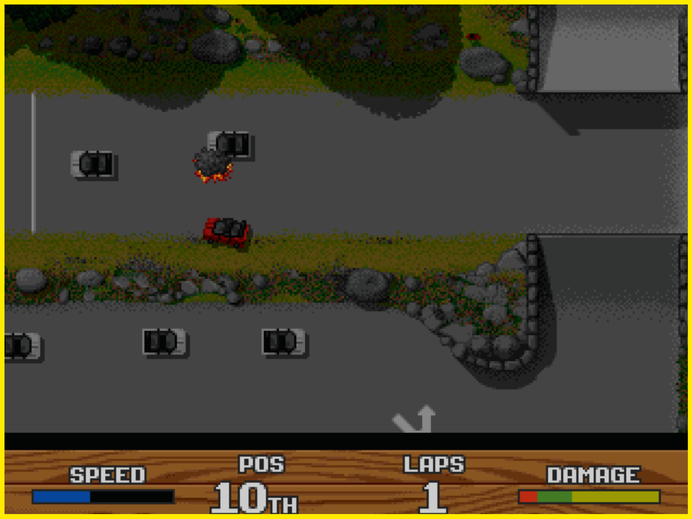
Didn't you know that your car is a noise pollution hazard ?

O.K. I'll fix my cigarette lighter !

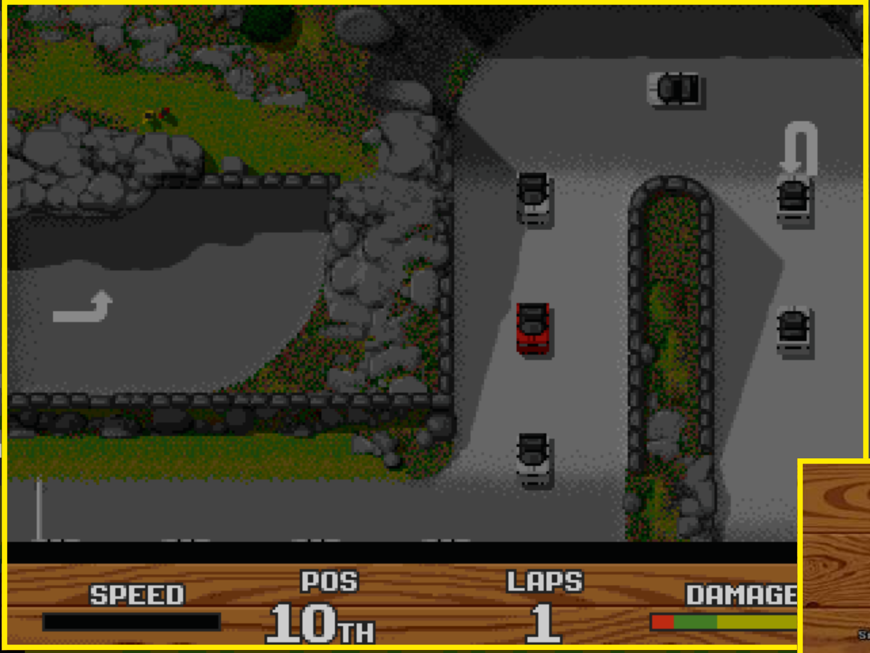
Yeah, but so are New Kids on the Block !

It must be the imredifluidulator....

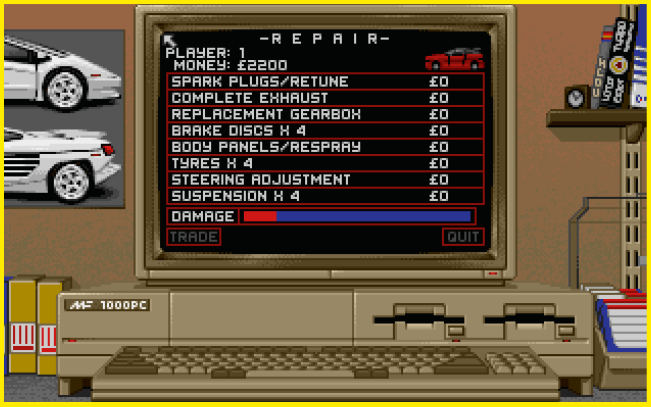
» [Amiga] Money could be earned by winning races and talking to various characters.



» [Amiga] Some weapons, notably the battering ram, would damage your car too.



» [Amiga] The direction of the tight bends are clearly laid out so you can plan ahead and know which way you're going!


-REPAIR-

PLAYER: 1

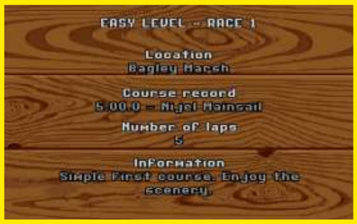
MONEY: £2200

SPARK PLUGS/RETUNE	£0
COMPLETE EXHAUST	£0
REPLACEMENT GEARBOX	£0
BRAKE DISCS X 4	£0
BODY PANELS/RESPRAY	£0
TYRES X 4	£0
STEERING ADJUSTMENT	£0
SUSPENSION X 4	£0

DAMAGE

TRADE QUIT

» [Amiga] Amass the cash and use it to repair your vehicle or start buying and selling power-ups,


EASY LEVEL - RACE 1

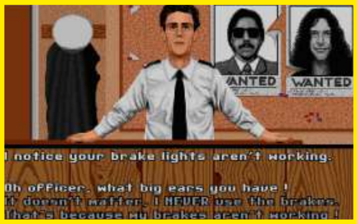
Location
Bagley Marsh

Course record
5:00.0 - Nigel Mainsail

Number of laps
5

Information
Simple first course. Enjoy the scenery.

» [Amiga] Gremlin didn't have the licensing rights to use real names but there was no mistaking who this was.



I notice your brake lights aren't working.

Oh officer, what big ears you have !

It doesn't matter, I NEVER use the brakes.

That's because my brakes aren't working !

» [Amiga] It's time to answer some police questions in the hope of avoiding a fine.

GET INTO POLE POSITION

USE YOUR WEAPONS WELL

■ When you begin amassing money, you can choose from a host of power-ups including weapons which can be assigned to the front and rear of your car (two weapons per race). Mines will keep rivals off your tail and Homing Missiles help you catch up by blasting a leading vehicle.

SPEED
POS
8TH
LAPS
7
DAMAGE

WATCH THE SCREEN

■ Try not to get stuck in a tunnel. For an idea of which way you're facing, watch how the screen moves to get a sense of which way you're going. If other cars are coming through, use a Super Missile which rotates around your car and blasts whatever comes too close.

SPEED
POS
10TH
LAPS
0
DAMAGE

SNATCH A SHORTCUT

■ If you spot a way of cutting a corner, go for it – even if a barrier is closing, you may find you can still get through and grab a time advantage. It's not always worth waiting around for a gate to open, particularly on the later levels when the rivals are harder to beat.

SPEED
POS
10TH
LAPS
0
DAMAGE

MAKE THE JUMP

■ There's an art to surviving those jumps and it's all about looking ahead in order to progress well. If you can see that you're likely to collide with the scenery, opt for a slight angle just before the leap otherwise aim to tackle a jump in a straight line.

▶ Another way to earn money was to successfully complete interviews which were interspersed between the races (although there was also the potential to be fined and therefore lose money!). You could be asked questions by a reporter, solicitor, aunt or police officer or be quizzed on aspects of the Highway Code, for instance.

"The screens were fun to write, Shaun says, "the Highway Code one being a bit of a joke because the real Highway Code has some daft answers too! You can pretty much pass your theory test by just going for the safest option every time. The other scenarios you just had to learn by trial and error – again, more depth and the more you played, the better you got."

Andrew enjoyed creating the screens and they were incredibly detailed, giving scope for strategy and satire. "I wanted these screens to give the game a more epic feel," he says. "What I didn't like about most, if not all, top-down racers was that they felt small, almost claustrophobic.

"Even though I knew I was limited in what I could do because of time, budget and technology, I wanted to give the impression there was a world that the race event took part in; something players could see and imagine, and that would be revealed more with each version."

Shaun certainly liked how the game was turning out during development. "Andrew's graphics certainly had a special style and they were all hand-drawn too," he says. "He used Deluxe Paint on the Amiga and I think the girl in the car-parts shop was the sister of one of our artists and the solicitor was based on one Andrew used when caught speeding. Only joking! He goes too fast to be caught! Certainly his graphics and game design were a huge part of the appeal of the games."

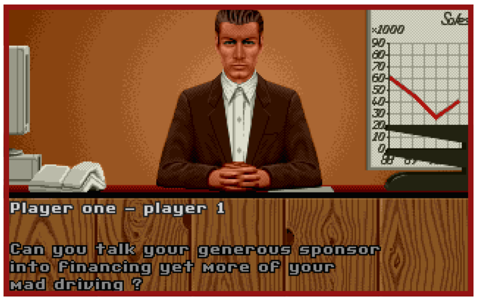
A lot of work had gone into the look, that's for sure. "With *Super Cars II*, I wanted a much-higher level of realism and I spent time photographing scenery for reference," Andrew says. Indeed, Shaun reckons that Andrew had also benefitted from his work on *Lotus*. "His graphics got even better the longer he worked on the Amiga," he says. "He took a lot of photographs and spent a lot of time getting the game to look just right."

As well as using Deluxe Paint, "the art package everyone used", Andrew got creative with some other specialised packages. "I had some bespoke animation software that worked with it so I could try out aspects like the car rotations," he says. "There was no scanning back then so everything was copied from reference materials or made up entirely."

Shaun remembers the process clearly. "Andrew was very proud of the car drawings as he had to do them all by hand – they weren't rendered – and this included lots of different rotations and tilting as the cars went up hills at all sorts of angles." Topping off the presentation was some cool music. "I wrote one tune," recalls Barry Leitch, "and I think I found the big synth chord samples in a Matthew '4mat' Simmonds tune. Rather than do a shitty sampled lead guitar, I used a chip sound to create the solo towards the end. My tune was pretty heavily influenced by a Sisters Of Mercy track."

It's just a shame, Andrew and Shaun say, that they didn't have more time to develop the game. "I had so many ideas for expanding *Super Cars II* but they had to be reined in," Andrew says. "This also happened on *Kikstart II* which evolved into *Super Scramble Simulator* so I focussed on broadening the aspects we had already introduced: better racetracks with more features."

Such commercial pressures and deadlines were due to their success in creating winning games. It meant they had to get into something of a routine in terms of games development. "Over the '*Lotus* years' we would start one game in April and it was out in October ready for Christmas then we started on the next one which was out at Easter," Shaun says. "*Super Cars I* and *II* took around five to six months each to develop."



Player one – player 1

Can you talk your generous sponsor into financing yet more of your mad driving ?

» [Amiga] The wealth of characters in between the races proved to be a welcome distraction.

Even so, it didn't stop the game from growing hugely in comparison and all of those additions caused a few headaches of their own. "I seem to remember the game came on two disks," Shaun says. "I had to take the game to the disk duplicators in Telford to be mastered and I had written my own disk format to squeeze more data onto a disk and they had trouble duplicating it because of that. I think we were there until 3am."

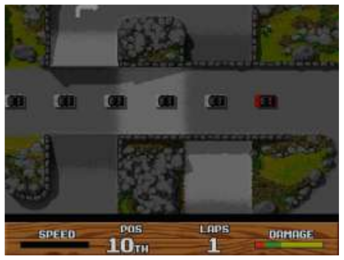
Still, it was worth it. Some reviewers enjoyed the game so much, they gave it full marks – we're looking at you, *Games-X* magazine! – while it got a clutch of scores in the 90s as well. *Amiga Power* was a tad less gushing and said it was "simply too frustrating to be addictive". Yet there was no doubt it was fun, particularly in two-player mode. It was, in short, another winning game from Magnetic Fields.

"As a sequel, we always wanted to add more," says Shaun. "Having more courses, moving objects, missiles and even a trading aspect made it a much more polished game – even if some people still, to this day, prefer the first one." ✱

"I HAD SO MANY IDEAS FOR EXPANDING SUPER CARS II BUT THEY HAD TO BE REIGNED IN"

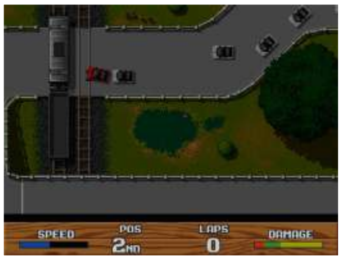
ANDREW MORRIS

KEY PLAYING TIPS FOR MASTERING SUPER CARS II



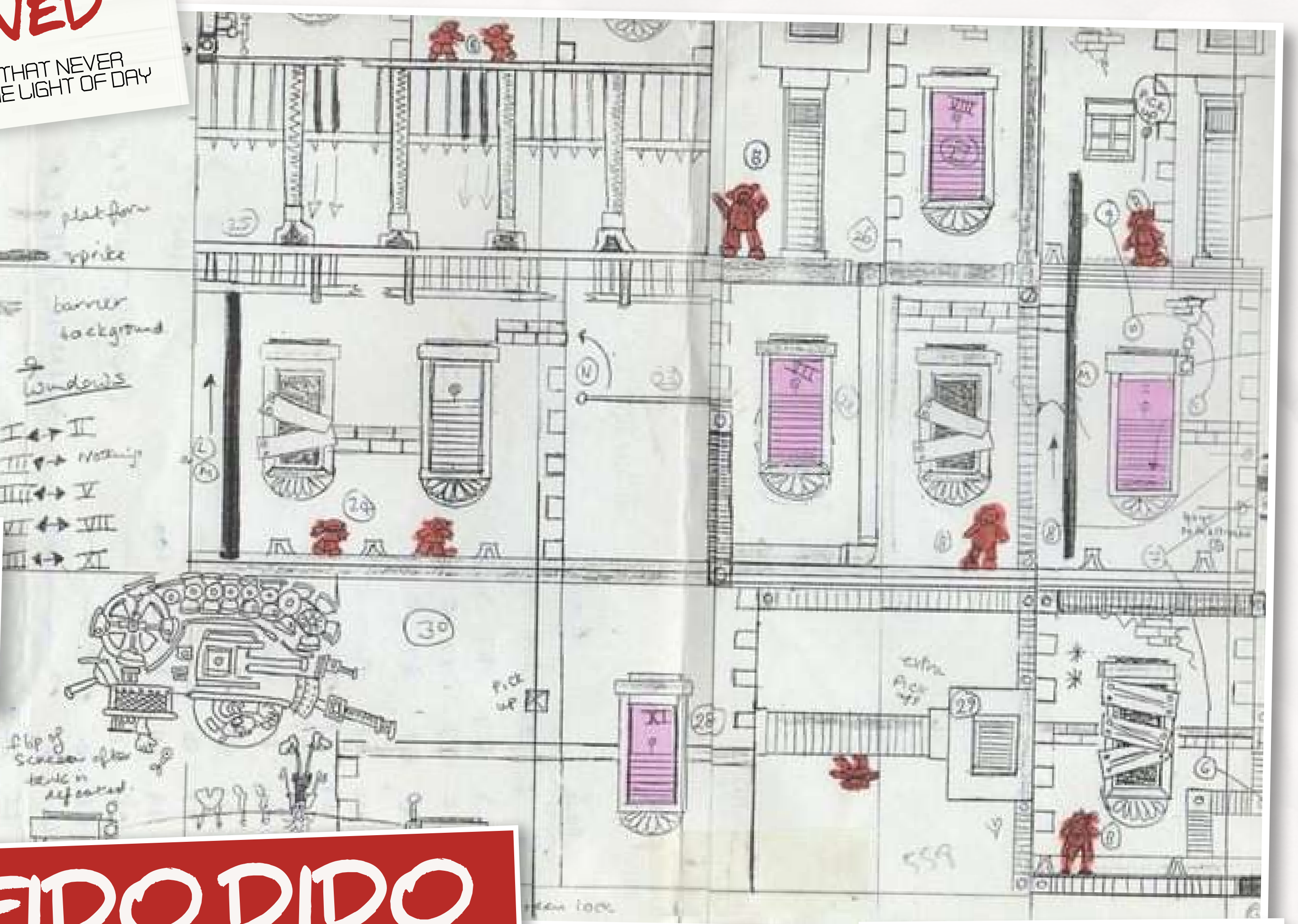
LEARN THE TRACKS

■ If you really want to win a race, then you need to practice, practice and practice some more. The key thing is remembering where those turns, jumps, shortcuts and tricky areas are otherwise your chance of avoiding collisions is slim.



TIME THE TRAINS

■ The trains are a great addition, adding a superb obstacle and progressively becoming less easy to spot as they hurtle down the tracks. Buy some Turbo Jumps and you can leap over the trains (and other cars). Practice the moment to leap, though.



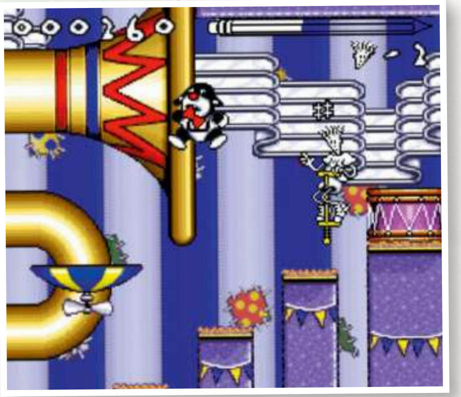
» Here's an original design plan for what looks like an upside-down stage, courtesy of Jas Austin.

» Before he found himself working on *Fido Dido*, Jas Austin made a name for himself with games like *Rex*.

FIDO DIDO

The forgotten mascot of the late-Eighties and Nineties who appeared on 7-Up bottles nearly had his own game. Nearly…

Words by Daniel Major



» [SNES] Here's Fido on a pogo stick, visiting the Cape Carnival stage.

IN THE KNOW

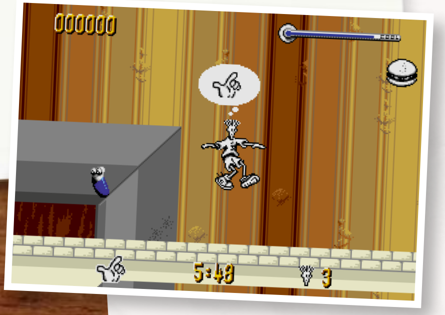
» **PUBLISHER:** KANEKO USA

» **DEVELOPER:** BITS STUDIOS

» **SYSTEM:** SUPER NINTENDO

» **DUE FOR RELEASE:** 1994

» [Mega Drive] Fido still looks like he doesn't care on this canned Sega version, but the level design looks like it doesn't either.



If you were around in the early to mid-Nineties, there's no doubt you probably would have crossed Fido Dido's path and even drank from the same can as him. The lovable hand-drawn comic-strip guy with the wavy hair appeared on everything from pencil cases to bomber jackets. Eventually, his creators Sue Rose and Joanna Ferrone would allow him to move away from the well-known fizzy drink 7-Up advertisement campaign and begin other adventures – namely a videogame.

In 1993, Kaneko USA was tasked with bringing Fido Dido and 7-Up to the Sega Genesis/Mega Drive with Teeny Weeny Games at the helm. The game was fully complete, shown at the 1993 Consumer Electronics Show in America and was even advertised in numerous magazines. According to *Sega Power*, it was ready for release. Unfortunately, Kaneko decided to restructure and the planned game disappeared into the void, like a plastic drinks bottle tossed into a bin in the local park, only resurfacing many years later as a dumped ROM online.

However, there's another twist of lime to this story. Refreshingly, at the same time, Kaneko USA approached Bits Studios, the UK software company behind the excellent Game Boy versions of *R-Type* and *R-Type II*, with the task of bringing Fido Dido to the Super Nintendo. "I'm Pretty sure Bits and Kaneko had no prior connection before the project, so I think this [*Fido Dido*] was our first game for them," recalls Jas Austin, the man behind the classic ZX Spectrum run-and-gun *Rex*. Bits was to bring Fido to life on the Super Nintendo but it was to be completely different to the Mega Drive version of the game and had nothing to do with the 7-Up brand.

"Fido's creators, Joanna Ferrone and Sue Rose were pretty hands-off from what I remember," recalls Jas. "The game design was left to us at Bits Studios. As long as the visuals and graphics fitted with Fido, they seemed happy. Our game was not linked with the 7-Up drink's brand, so there was no input from them at all."

Jas does remember that the team were given an instruction booklet on Fido's appearance and how he should be portrayed in the planned game. "Fido's creators provided the

THESE MASCOTS DID HIT SHELVES

ONE STEP BEYOND FEATURING COLIN CURLY

1993, OCEAN

■ The Amiga loved a mascot and it felt at times that it was riddled with them. Fans of Quavers will be well aware of Red Rat Software's *One Step Beyond* as it featured Quavers' canine mascot Colin Curly, making him proud by placing him in a rather entertaining puzzle game.

COOL SPOT

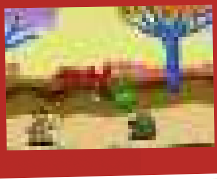
1993, VIRGIN INTERACTIVE

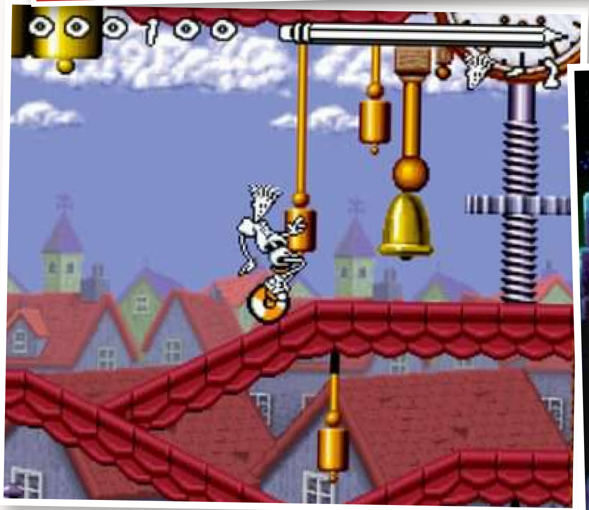
■ Where Fido Dido failed in games, Cool Spot succeeded and the iconic character with a love of sunglasses went on to star in several games. Many will argue that his first outing remains his best and when you watch him surfing on an overturned 7-Up bottle it'll take you straight back to seeing a 7-Up can in a 1993 newsagent. Good times.

CHESTER CHEETAH: TOO COOL TO FOOL

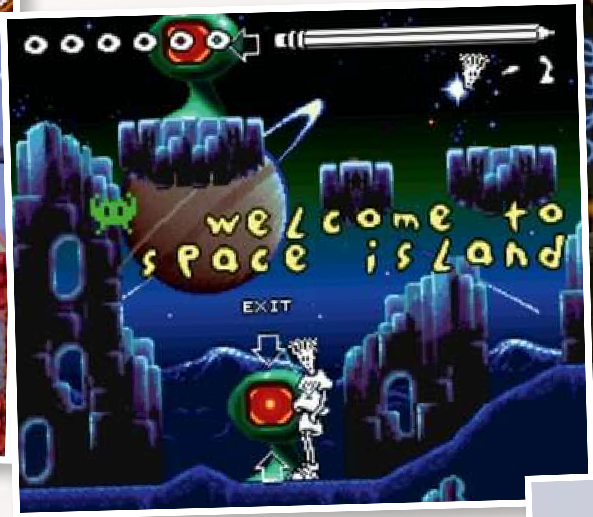
1992, KANEKO USA

■ Not to be outdone by Quavers, Cheetos, those yellow Twiglet-type crisps, also got in on the videogame act, more than once in fact. Chester Cheetah's first platform game looks cool and is very nicely animated – but don't be fooled, it's just OK. In fact, you might say it's a little cheesy. [That's terrible – Ed]

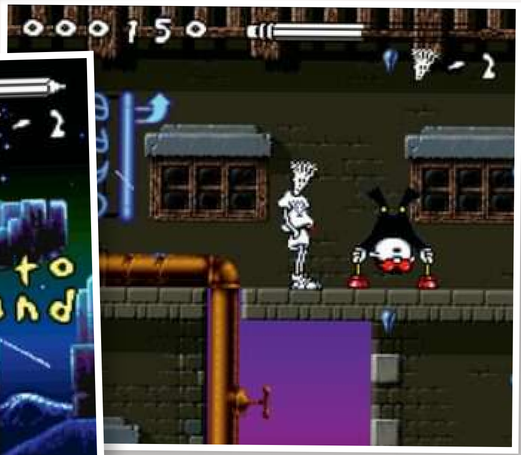




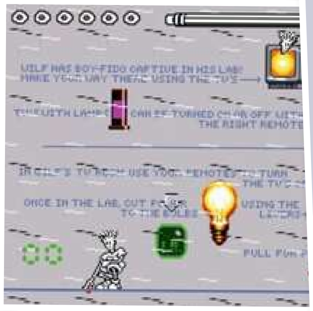
» [SNES] Fido getting to grips with a unicycle while navigating a town filled with bells.



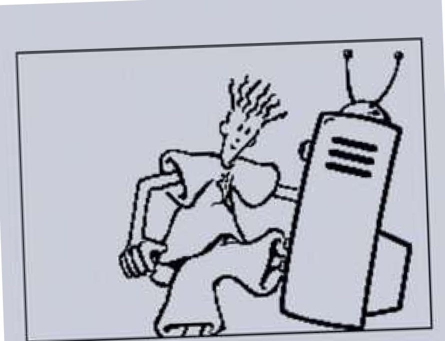
» [SNES] Everything seems friendly enough, but we're not too sure about that Space Invader.



» [SNES] Here's an interesting one. Everything is upside down, except Fido, of course. It reminds us of *Castle Of Illusion*.



» [SNES] Bits Studios added some helpful instructional hints for players new to Fido's world.



» [SNES] Who hasn't dreamed of climbing into the TV during an episode of *Dickinson's Real Deal*?

team with a large, printed document that we nicknamed the 'Fido Bible'. It contained numerous illustrated drawings and poses of Fido Dido. This enabled us to match our art to the source, right down to the number of hairs on Fido's head."

Jas wasn't aware of anything related to Fido Dido outside of the 7-Up advertisements he featured in, but by looking back on Fido's history, Jas and the rest of the team were able to make their game even more interesting as their understanding of him grew. "I was only aware of Fido Dido from the 7-Up advertisements," Jas admits. "It was only when starting to work on the game, I found out it was a successful cartoon strip before the 7-Up fame. I soon became a fan of Fido though and I felt it would make a great videogame." Jas has a point too and he mentions its distinctive look that came from "using the striking style of the black-and-white characters against colourful detailed environments", and how this eye-catching look was married to "quirky, largely non-violent gameplay".

But as quick as poor Fido Dido got his spanking new Nintendo adventure, the game was swiftly cancelled, and, just like his planned Mega Drive game, the hopes of appearing outside of comic strips and 7-Up cans was quickly quashed.

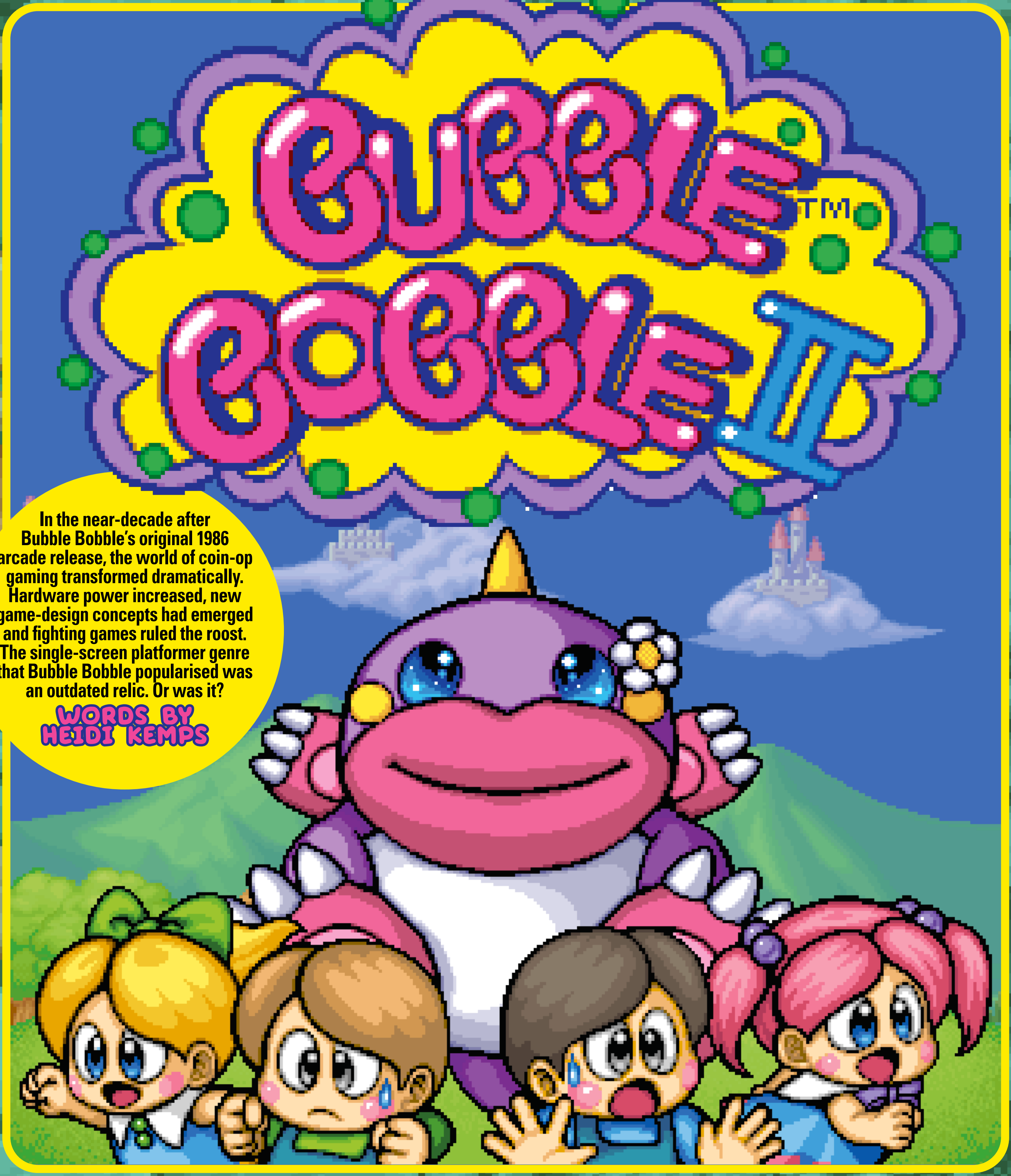
But what happened? Why was the SNES game canned? Jas doesn't fully understand but he opens the ring-pull on a possible explanation. "From what I understood Kaneko just stopped making games," he tells us about the abrupt cancellation. "Later, in 1994 it transpired that they shut down their US office, and that led to them cancelling a lot of games, ours included. *Fido Dido* was complete, and it had even gone through our internal testing, so it was a real surprise at the time when it was cancelled."

As Jas mentioned Kaneko USA did indeed stop making games and left the videogames industry in America sometime in 1994, around the same time that a certain Cool Spot character appeared. Luckily, that's not the end of Fido Dido's adventure.

In May 2014, Jas managed to track down the unreleased ROM of the game and he kindly gave us a sneak peek of what we could have expected from the final game, releasing some screenshots of the completed game on social media, including a video clip of a full run through of the first level. It's particularly noticeable for its non-violent approach, with Fido Dido tackling baddies with only a yo-yo to hand.

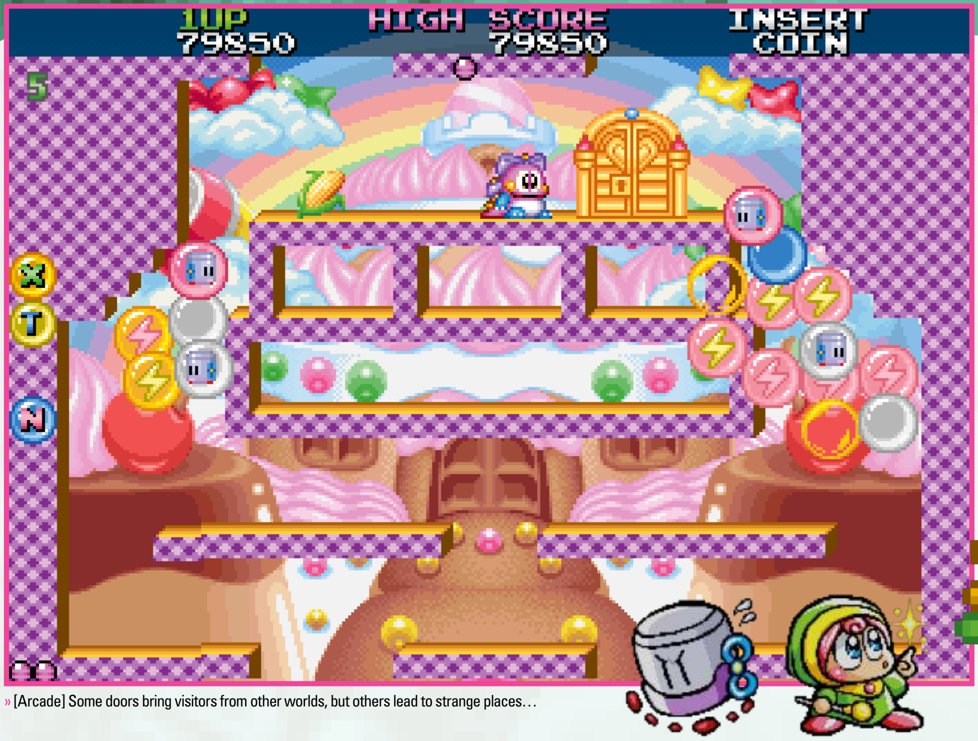
The game's intro shows our hero entering a room and being sucked into a TV set, while the game's villain explains that Fido's friends have been captured and sucked into another world via the television. Fido is then sucked into the television screen himself, setting off the adventure to save his friends. It's a pity the SNES game was cancelled as the level design looks much more in-depth than its Mega Drive counterpart, thanks to interesting design choices and neat gameplay mechanics like using the yo-yo to open doors and hit other obstacles, similar to *Earthworm Jim*'s body whip. "To this day I'm still not aware of a videogame protagonist wielding a yo-yo while riding a pogo stick," concludes Jas.

Sadly, for all its promise and the hard work of Bits, the planned game simply wasn't to be and just like that, Fido Dido's great videogame adventure simply fizzed out. *

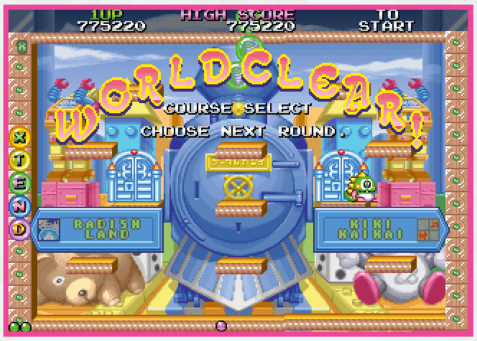


In the near-decade after Bubble Bobble's original 1986 arcade release, the world of coin-op gaming transformed dramatically. Hardware power increased, new game-design concepts had emerged and fighting games ruled the roost. The single-screen platformer genre that Bubble Bobble popularised was an outdated relic. Or was it?

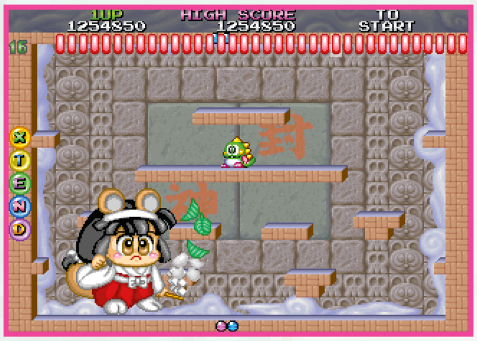
WORDS BY
HEIDI KEMPS



» [Arcade] Some doors bring visitors from other worlds, but others lead to strange places…



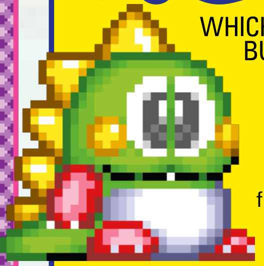
» [Arcade] Your journey will take you across many branching paths – including into the worlds of other Taito games!



» [Arcade] Sayo from *Pocky & Rocky* turned big and evil. Wait, is that really Sayo?

CHOOSE YOUR HERO

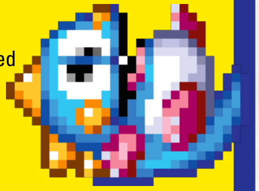
WHICH ADORABLE BUBBLE BUDDY WILL YOU PICK?



BUBBLUN

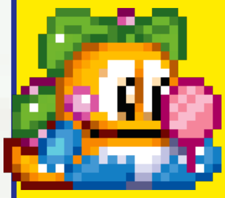
Average stats all-around. His charge shot fires three bubbles straight ahead in a row – great for trapping enemy groups.

BOBBLUN



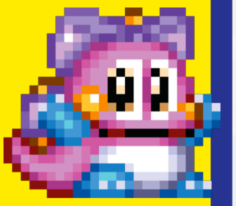
Has the highest speed of the gang. He's absurdly fast with the shoe power-up. Too bad his charge shot – an angled attack – isn't very useful. For advanced players.

KULULUN



Her bubbles have the longest range, made even better after a candy power-up. Use her T-shaped charge shot to phase bubbles to both sides and through barriers below you.

CORORON



She's got the highest default bubble-blowing speed. Her charge shot is the inverse of Kururun's – it can phase bubbles upwards through walls, making it a lifesaver.

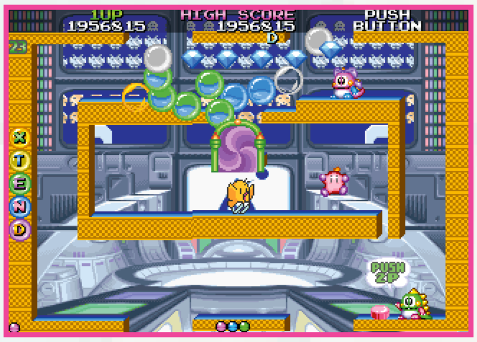
The origins of *Bubble Symphony* can be traced back to 1992 when Taito introduced the F3 board – its new state-of-the-art 2D arcade hardware. In 1994, Taito developed the F3 Package System – modular hardware meant to compete with SNK's popular Neo Geo. Taito pushed this new system hard, debuting it with its fighting game *Kaiser Knuckle*, but it knew it needed iconic game brands to really sell the new hardware in arcades.

Taito soon announced new games in two long-dormant series: *Darius Gaiden* and *Bubble Symphony*. A shooter and a single-screen platformer may have seemed doomed in the fighting game-saturated market of 1994. Yet in a twist of fate, *Kaiser Knuckle* would become notorious for all the wrong reasons, while *Darius Gaiden* and *Bubble Symphony* would go on to be remembered as classics, standing out precisely because they weren't chasing the trends.

Taito had likely entertained the idea of a proper sequel to the arcade *Bubble Bobble* for a while. While *Rainbow Islands* may have been 'The Story of *Bubble Bobble II*' gameplay-wise, it had little in common with it. Certain PC/console ports of *Bubble Bobble* expanded on the base game, changing things up with new secrets, items and levels. And due to the enduring popularity of these ports, in 1993, *Bubble Bobble Part II* released for the NES and Game Boy – though it wasn't made by an internal Taito team.

But while somebody else was making the NES *Bubble Bobble Part II*, a group of developers centred around Taito's Osaka development branch were working on a project for the F3. Tentatively titled *Bubble Bobble II*, it went out for covert location testing in arcades in late-1993 to see if arcade players would still get excited over the prospect of a new *Bubble Bobble*. The response must have been encouraging in some way, because several months later in 1994, *Bubble Symphony* would make its arcade debut.

Taito's sequel picks up years after the events of *Bubble Bobble* and *Rainbow Islands*. The children of Bub, Bob and their girlfriends are roughly the same age as their parents were when they had to venture into the Cave Of Monsters. But the son of Super Drunk, *Bubble Bobble*'s final boss, has also come of age, and he's still mad about how Bub and Bob beat his dad. While Bub and ▶



» [Arcade] Tiki, the cute kiwi from *The New Zealand Story*, joins in to sling some arrows.

Bob's children are reading books at the library, they're transformed into bubble-blowing dinosaurs and thrown into a new dimension. In order to escape, the kids will have to use their bubbles, the bonds of inter-dimensional friendship and the magic of music to defeat the dangerous Drunks.

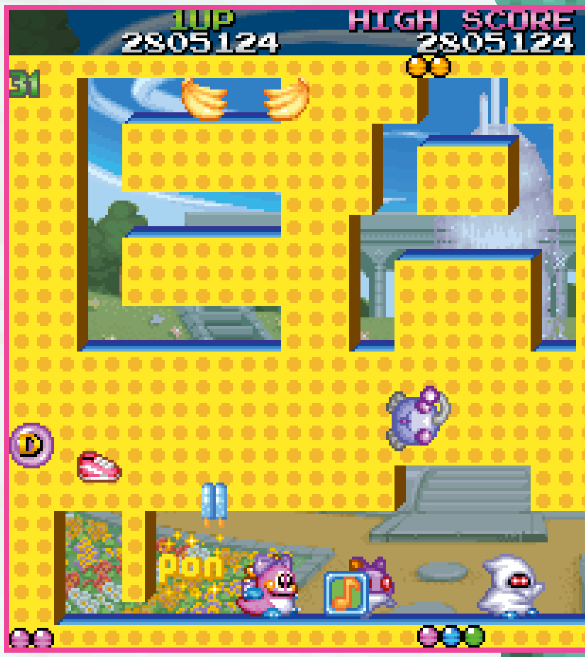
Core gameplay is largely unchanged from the original *Bubble Bobble*. Your goal is to eliminate all of the enemies on each single-screen stage to proceed. To do so, you must either encase them in bubbles which you then pop, or use other means like bubbles containing attack magic. Grouping enemies in clusters and popping them together yields more points (and a satisfying slide-whistle sound), but leaving enemies in a bubble for too long will make them mad and allow them to escape. Special power-ups and unique bonus items appear on each stage and have effects ranging from giving your bubbles more speed and distance to wiping the screen clear of enemies in a hail of stars or lightning bolts. Take too long on a level, and an invincible Skel-Monsta will appear to chase you until you either die or finish the stage.

Bubbles act as both weapons and mobility items, as you can bounce on them by holding down the jump button – an essential skill for advancing past the later stages. Each of the four characters – Bubblun, Bobblun, Kululun and Cororon – have varying strengths in speed, bubble distance and firing rate.

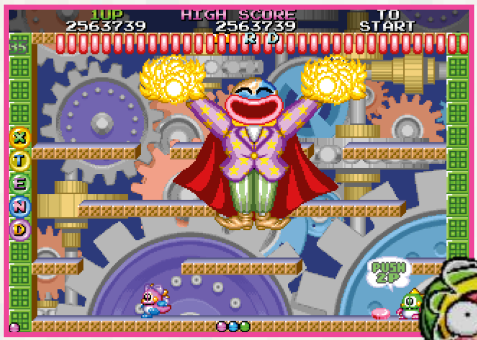
New to *Bubble Symphony* are charged bubbles: hold down the bubble button for a few seconds and your dino of choice will fire three bubbles out in a pattern unique to them.

The basics are the same, but the challenges *Bubble Symphony* presents are completely new. More attack bubble types, like rainbows from *Rainbow Islands* and current-chasing wind blasts, create new ways of defeating enemies. New foes with challenging attack patterns inhabit the levels, requiring you to observe and learn how they behave. In contrast to *Bubble Bobble*'s single end boss, *Bubble Symphony* has multiple bosses with their own quirks. And after each boss fight, you choose a branching path, *Darius*-style, to a new area with distinct backgrounds, enemies and stage layouts.

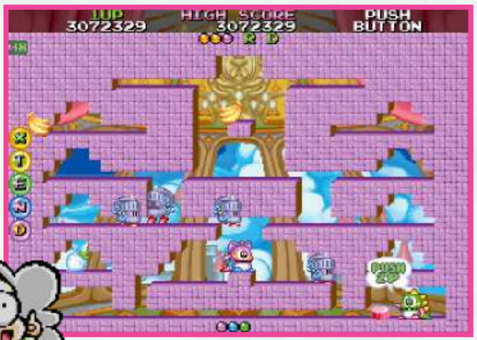
Like *Bubble Bobble*, *Symphony* is packed to bursting with arcane secrets. Power-ups spawn



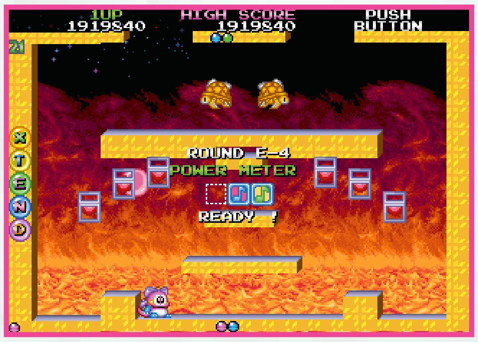
» [Arcade] Yes, there are still hidden (and not-so-hidden) messages and images in the level designs.



» [Arcade] This dapper globe-headed fellow is Jack O'Colson, the big bad from Taito's delightfully bizarre *Pu-Li-Ru-La*.



» [Arcade] Be careful in narrow passageways – you can walk through them, but you can't blow bubbles!



» [Arcade] The *Darius*-themed world, Sun-"A" Zone, is packed with dangerous flying enemies.

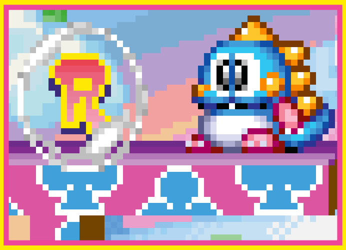
TOP TIPS FOR BASED BUBBLERS

USE CHARGE SHOTS!

By holding down the bubble button for a few seconds, you can fire multiple bubbles at once. When your dino flashes, it's ready to go! Each dino has a unique charge shot type, so play around a little to see how they all work, or check out the Choose Your Hero boxout for a quick guide.

SEARCH ALL AROUND!

You'll need to get three musical notes of each colour (usually within the same world) to get one of the four keys necessary to reach the final world. One note is in a specific location on each screen. They'll pop out when you touch them, but they can be easy to miss – many are hidden very well.



LOOK FOR SPECIAL BUBBLES!

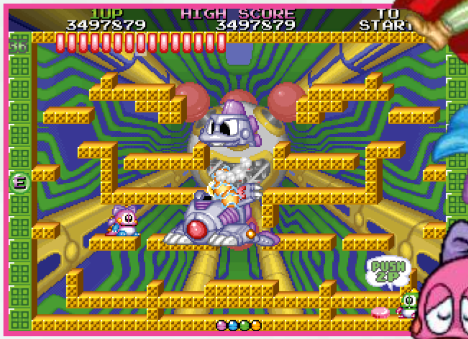
When "Hurry Up!" appears, something else might emerge as well. Some stages will spawn a bubble with the letter R, O, or D on them when time's running out. If you can collect them all, the characters will be human again! Being a bubble dinosaur is arguably cooler, but if you want the best ending, humanity is the way to go.

RECONSIDER RESETTING!

Bubble Symphony is filled with secret items that spawn under certain conditions, like when all players have run a certain distance or blown many bubbles. These tallies carry over into the next game, and when you reset, the counters reset, too. Play through several times in one session and see what rare goodies pop up!

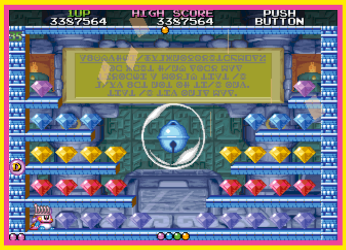
PUSH BUTTON
PUSH 2P
CREDIT 3

1UP 5246319
HIGH SCORE 5246319
TO START
PUSH 2P



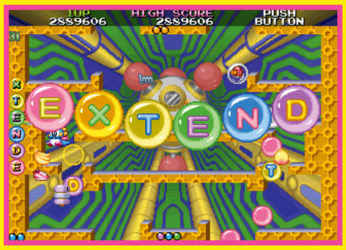
» [Arcade] Flying mechanical dinosaurs – they don't spit bubbles, but their electric projectiles hurt plenty.

HIGH SCORES, HIDDEN GOODIES AND TRUE ENDINGS!



DON'T DIE!

This is the most basic of game advice, but avoiding death in *Bubble Symphony* is extra beneficial: if you're deathless when you reach the second-to-last stage in each world, a special door will appear with copious bonus gems, a special item to use in the next world and a coded message.



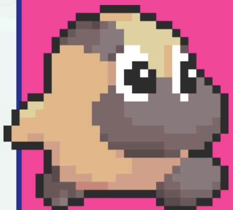
GET EXTEND BUBBLES!

Extra lives are rare in *Bubble Symphony*: you can't earn them through points, only through the EXTEND bubbles that spawn after you pop a big enemy cluster. If you want to clear *Bubble Symphony* with a single credit, prepare for a massive challenge!

THE EXTRA PLAYERS

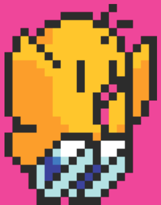
CAMEOS FROM DIFFERENT DIMENSIONS!

Certain items will spawn an interdimensional door from which Taito guest stars will emerge. These characters are also controllable with your stick and buttons. Any enemies they manage to eliminate turn into point bonus items – but be careful not to manoeuvre your dino into danger at the same time.



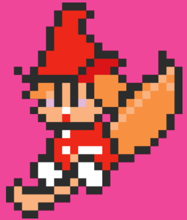
HIPOPO

An intrepid platypus from *Liquid Kids*, a scrolling platformer from 1990. He throws water-filled bubbles to whisk foes away!



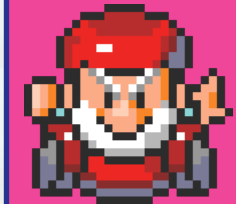
TIKI

A friendly kiwi from the beloved classic *The New Zealand Story*. Tiki might move a little slowly, but his long-range arrows can really hit the spot!



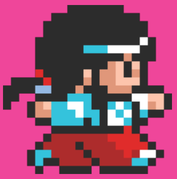
PTOLEMY

The little witch from *The Fairyland Story*. As in her original game, every enemy she hits with her magic spells transforms into cake. Her range might be short, but each cake is worth big points.



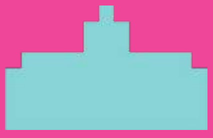
BOB

Not your blue dino dad! As another single-screen platformer veteran, Bob the dwarf comes to *Bubble Symphony* from the fantasy land of *Don Doko Don*. He'll pound enemies into the ground with his powerful mallet.



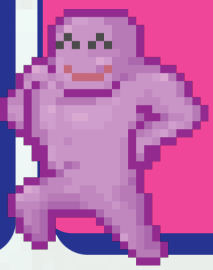
SAYO

The brave shrine maiden from *Kiki Kaikai* (better known as *Pocky & Rocky* in the West) is here to expunge evil spirits from the maze! Attack with her ofuda to send enemies to the afterlife.



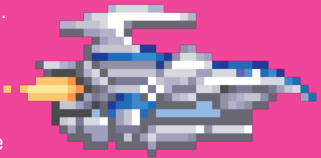
CANNON

Yes, it's the little blaster from *Space Invaders*. It can shoot beams straight up to take care of flying foes with ease. Unlike other guest characters, the cannon can't jump, so be very careful when you are manoeuvring.



MR MIKATA

Hailing from the delightfully bizarre avant-garde beat-'em-up *Pu-Li-Ru-La*, Mr Mikata is the character that sometimes emerges when *Pu-Li-Ru-La*'s kids use their magic attack. He'll strut around and dance enemies to death.



SILVER HAWK

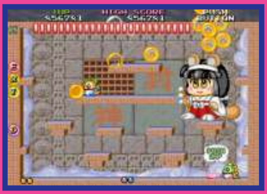
Yes, the *Darius* ship is here, too. Did you really think *Bubble Symphony* would have a *Darius*-themed area and leave out the iconic protagonist? Fly the Silver Hawk around the stage and blow away the enemies!

CONVERSION CAPERS

PERFECT PORTS… AND THE FORGOTTEN FLOP

It took a surprisingly long time for *Bubble Symphony* to see any ports. Despite releasing in 1994, the earliest home editions wouldn't debut until three years later and, in one case, a mostly finished port would be cancelled.

SATURN



Bubble Symphony on the Sega Saturn was released in November of 1997 and published by VING, a company known for high-quality arcade ports to PC platforms. VING shifted attention to console publishing in the 32-bit era, giving us ports of Taito classics like *Metal Black, Night Striker* and *Elevator Action Returns.* Sadly, the weak Saturn market abroad meant nobody wanted to pick it up for international release, so it remained a Japanese exclusive.

The Saturn version of *Bubble Symphony* is a superb port – load times are minimal, graphics and sound effects are spot-on, and most importantly, the action feels identical to the arcade. Plus, it has all of the options of the arcade PCB… and more! By entering the code L, R, L, R, A, B, C, B on the start screen, you'll unlock a hidden second options menu. From this menu, you can enable Super Mode and change the game's territory to the USA or World versions, making all the in-game text English.

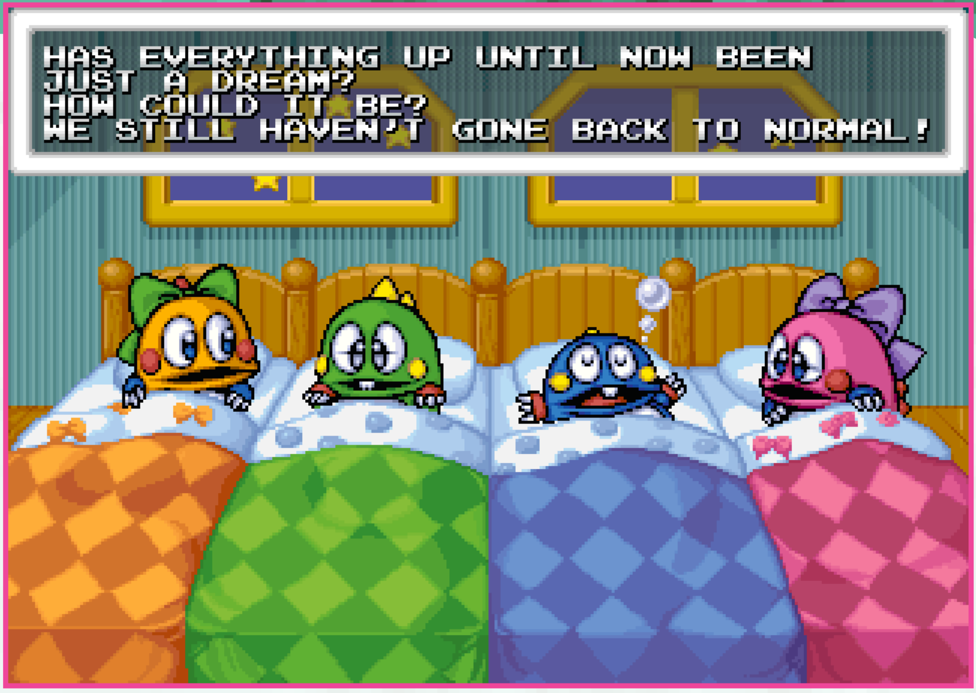
PLAYSTATION

Then there's the PlayStation conversion, which is a mess. *Bubble Symphony* on PlayStation never officially released – review code was sent, but it never made it to stores. A 'finished' version has been floating around online, but it's hard to say if it's really manufacture-ready code.

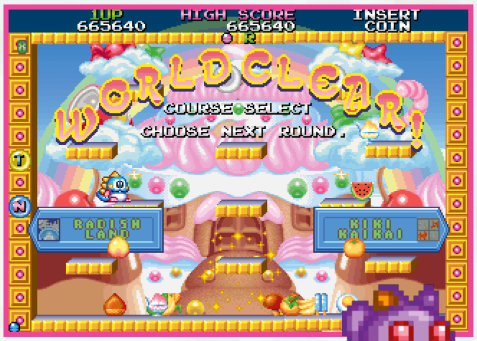
If it is the final version, it's easy to see why this was binned. Bad MIDI music, weird enemy behaviour and animation, sloppy movement and collision, dropped inputs – it's awful. It seems like the developer, East Point Software, didn't have access to the same resources as VING did. Perhaps a finished retail version would've been better, but we'll never know.

Other ports include inclusion on *Taito Memories II Gekan* for the Japanese PS2 and *Taito Legends 2* for PC/PS2/Xbox. These collections are essentially emulators running the arcade ROMs, and they do a serviceable job – though they run in an upscanned resolution that can make those pretty pixels all icky and blurry. Finally, there's the release on the Egret II Mini, which is arcade-perfect but suffers slight input lag (and no region select options).

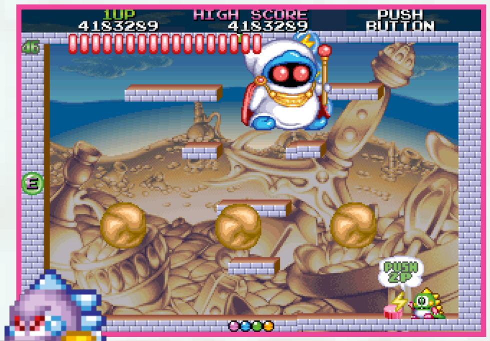
HIGH SCORE
PUSH START



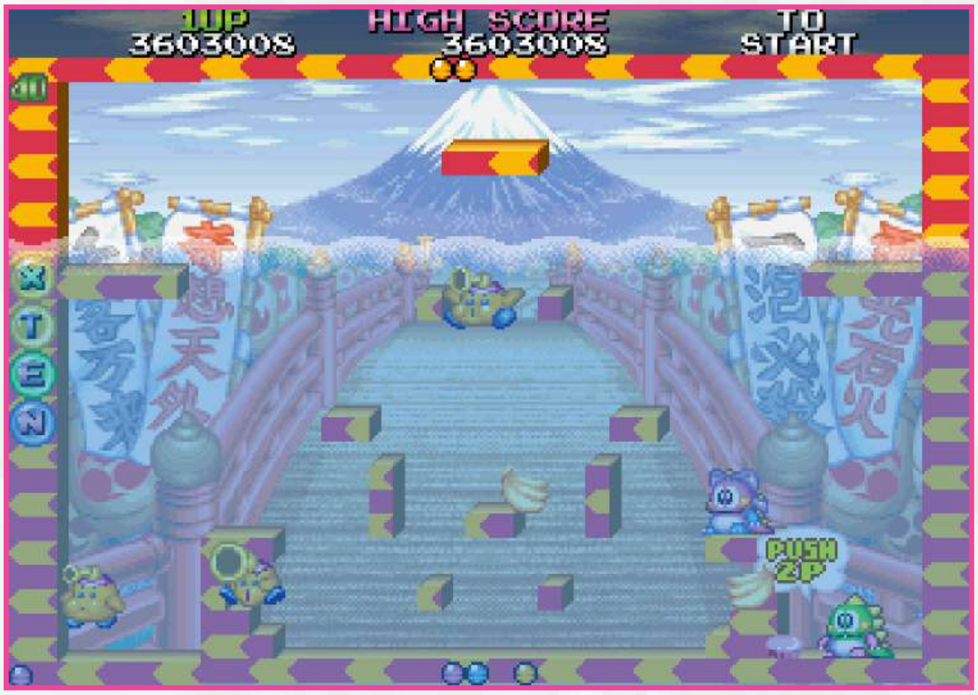
HAS EVERYTHING UP UNTIL NOW BEEN JUST A DREAM?
HOW COULD IT BE?
WE STILL HAVEN'T GONE BACK TO NORMAL!



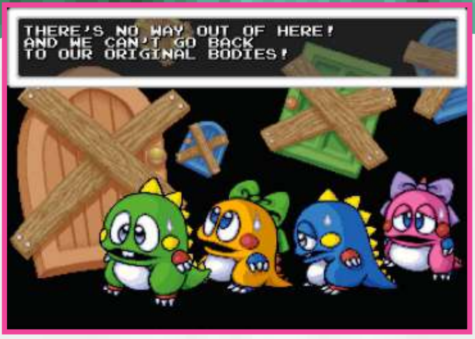
» [Arcade] Beating a boss earns you a celebratory chest and a choice of where to venture next.



» [Arcade] This massive Mighta in regalia wields magic to summon giant rocks. Evasion is key.



» [Arcade] Classic items like the screen-clearing water flush return, and they're just as potent. But look out for new items, too.

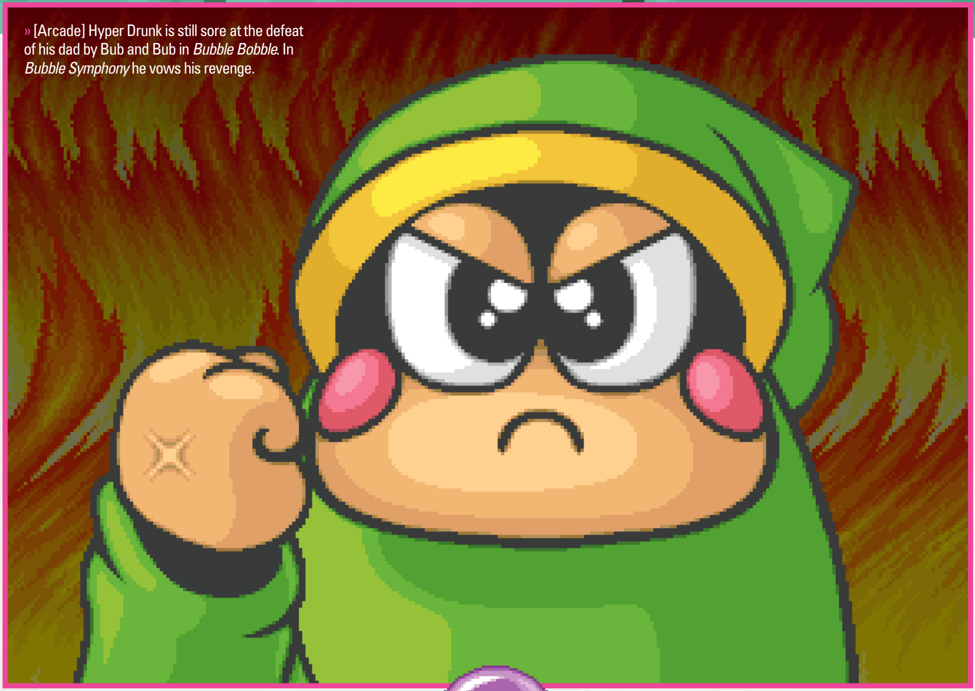


based on an assortment of hidden metrics the game tallies during play, hidden musical-note items litter each level, and depending on how well you play, you might open special doors to bonus rooms with special items and coded messages. No two playthroughs of *Bubble Symphony* are exactly alike, and that's part of the fun and challenge. Part of *Bubble Bobble*'s enduring charm is that it is a game filled with arcane secrets and surprises, and *Bubble Symphony* takes that feeling of discovery and wonder even further, like a forbidden picture book that's filled with magic.

'Picture book' is an apt description – *Bubble Symphony* is a gorgeous game, packed with colourful visuals, charming character animations and a vibrant feeling of life. It's accompanied by a magnificent, boisterous big-band soundtrack. Music is the game's overarching theme, so Taito absolutely had to nail it – and what *Bubble Symphony*'s soundtrack lacks in variety, it makes up for in sounding amazing. The audiovisual elements make *Bubble Symphony* feel like a celebration – and in many ways, it is – a celebration of timeless gameplay, of unbridled whimsy and of Taito's legacy.

It feels strange to call a game made in 1994 'nostalgia-driven', but that's exactly what *Bubble Symphony* is – it's not just a game that wants to evoke the same sort of wonder and joy players experienced when playing through *Bubble Bobble*, but also celebrate the arcade legacy of Taito up to that point. Taito didn't shy away from referencing its older games in new releases, but nothing to this point was quite as big as *Bubble Symphony*. Levels are themed after games like *Darius II*, *Pu-Li-Ru-La* and *Kiki Kaikai*/*Pocky & Rocky*, along with a 'TV Machine' world where every stage design is based on a Taito game. Collecting certain power-up items will summon a Taito character from another game to join the fight. Even the high score screen is packed with Taito-referencing Easter eggs.

Replicating the magic of *Bubble Bobble* is hard – numerous half-assed ports and farmed-out pseudo sequels prove this. *Bubble Symphony* might be the only *Bubble Bobble* follow-up to not just live up to but actually surpass its progenitor. It's an absolute joy to play over and over, seeing the various paths, finding all of the different endings and relishing in the constant joy of unearthing its secrets. Any fan of classic arcade gaming, of secret-packed platformers, or of Taito in general owes it to themselves to experience this *Symphony* for themselves. *


» [Arcade] Hyper Drunk is still sore at the defeat of his dad by Bub and Bub in *Bubble Bobble*. In *Bubble Symphony* he vows his revenge.

1UP
4770949
HIGH SCORE
4770949
PUSH
BUTTON

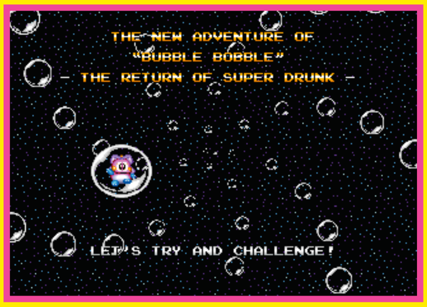
1UP
1123650
HIGH SCORE
1123650
TO
START

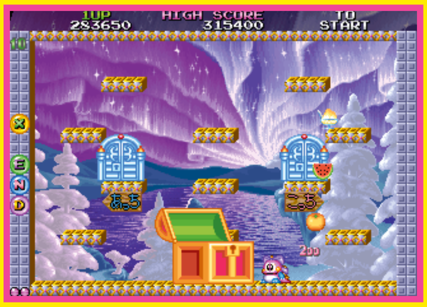
HUMBLE BEGINNINGS

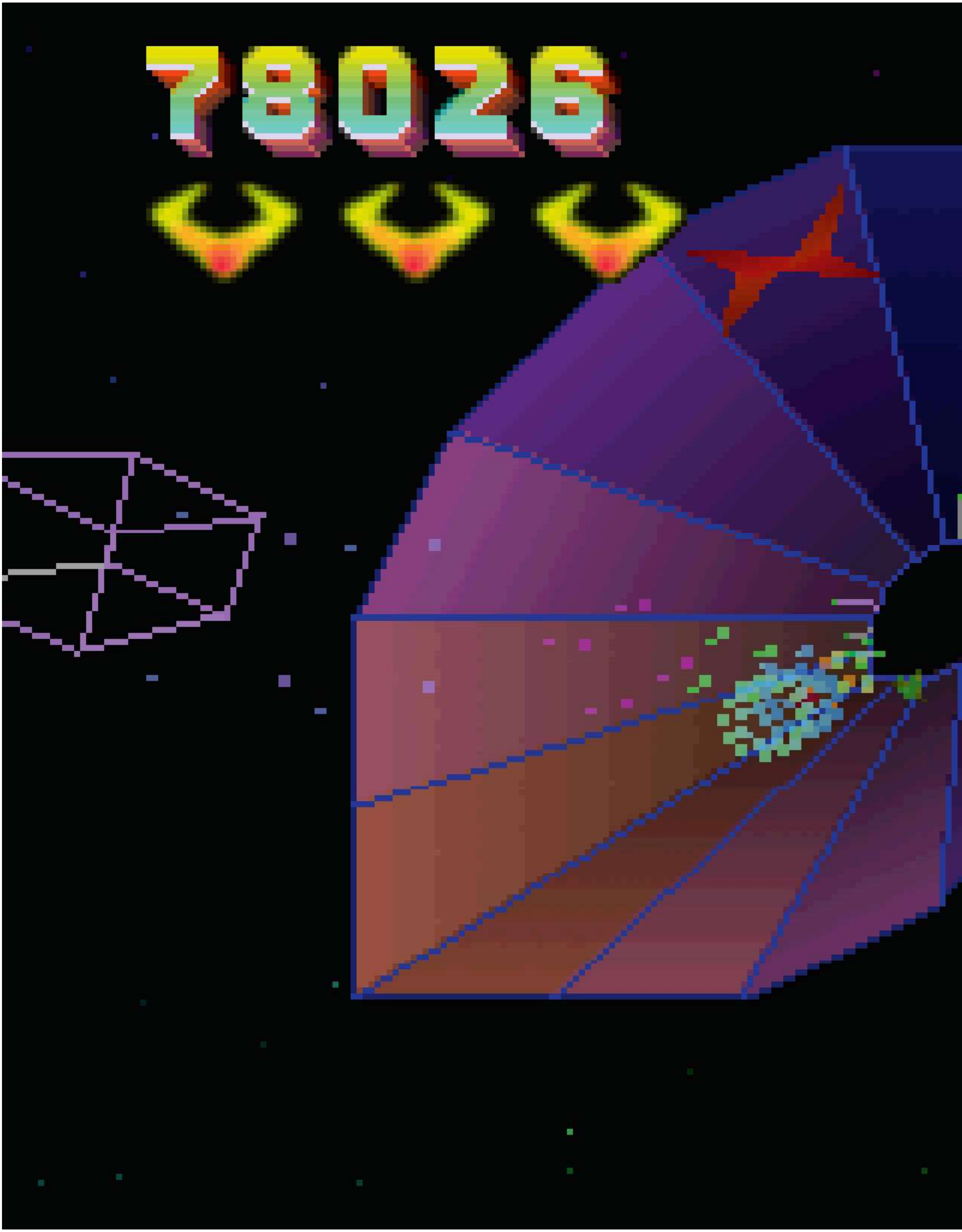
BEFORE THE SYMPHONY BEGAN…

The *Bubble Symphony* prototype ROM, *Bubble Bobble II 0.0J*, shows us a glimpse of the game very early in development. Several elements seen in the final game are present at this point in development: four selectable characters, branching paths, and the musical theme – including hidden musical-note items in each game (that don't do anything yet). Certain new attack bubbles, like the Rainbow Bubbles, are present in limited amounts.

So, what got changed between this version and the final? For starters, the music and sound are extremely basic themes from the original *Bubble Bobble* with some nicer-sounding instrumentation. The stages are in a different order, though many level designs would eventually see use in the final. Numerous enemies and bosses are missing, and some that are present have different behaviour. Item selection is limited, lacking many of the fun special power-ups and character cameos that we'd see in the finished game. But perhaps most notably, the game ends after 30 stages – no endings have been made yet! With so much missing or changed, *Bubble Bobble II 0.0J* is an interesting curiosity to see just how Bubble Symphony evolved – but it's not meant for serious play.


THE NEW ADVENTURE OF
"BUBBLE BOBBLE"
- THE RETURN OF SUPER DRUNK -
LET'S TRY AND CHALLENGE!

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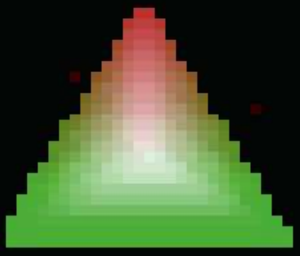
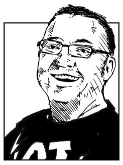


Tempest 2000

PURE MINTER MAGIC



» SATURN » 1996

» HIGH VOLTAGE SOFTWARE

After recently reviewing *Tempest 4000* I was compelled to revisit the rather magnificent *Tempest 2000*, which originally debuted on Atari's Jaguar. While I don't own Jeff Minter's Jaguar version, I do have High Voltage's Saturn conversion, which was programmed by Nate Trost, and boy is it great.

Don't get me wrong, *Tempest 4000* on Switch looks absolutely glorious on an OLED screen with its perfect blacks and luminous colours, but there's something strangely hypnotic about playing *Tempest 2000* on an old-fashioned TV, or in my case a gigantic 29-inch PVM. Let's be honest, Jeff's game was originally envisioned to be played on a CRT back in the Nineties, so that's how I'm playing it today and it's bloody great.

I play *Tempest 2000* the same way I play *Rez* – lights off, the sound on my Sony hi-fi cranked up to dangerously loud levels and my face a good ten inches from the screen. Sometimes I'll listen via headphones but typically I want to feel the room shake as I play, and I want to be viewing virtually nothing other than those tremendous on-screen visuals – after all, *Tempest 2000* works best when you can fully immerse yourself in Jeff's brilliance and if that means upsetting the neighbours, then the neighbours be damned.

Aside from its hypnotic, pulsing soundtrack that you feel almost as much as you hear, revisiting the Saturn release also reminded me of how rich a game it actually is. In addition to *Tempest 2000* you also have the original arcade hit, a modified version called Tempest Plus which lets you play co-op with a friend or an AI-controlled drone and the rather excellent Tempest Duel which pushes competitive play and friendships to the limit. There's also Beastly Mode, which I've never unlocked because I've never completed all 100 levels. Maybe that time is now, because when you get in 'the zone' with a game like *Tempest 2000* anything is possible. *

THE MAKING OF

RED FACTION

RED FACTION BROKE NEW GROUND BY ACCOMPLISHING SOMETHING VIDEOGAMES STILL STRUGGLE TO ACHIEVE TODAY: MEANINGFUL VIDEOGAME DESTRUCTION. RETRO GAMER SPEAKS TO LEAD DESIGNER ALAN LAWRANCE ON THE STRUGGLES AND TRIUMPHS OF DEVELOPING THE GAME'S REVOLUTIONARY GEO-MOD ENGINE

WORDS BY SAB ASTLEY

PlayStation 2
RED FACTION
THQ

IN THE KNOW

» **PUBLISHER:** THQ

» **DEVELOPER:** VOLITION

» **RELEASED:** 2001

» **PLATFORM:** PS2, PC, MAC

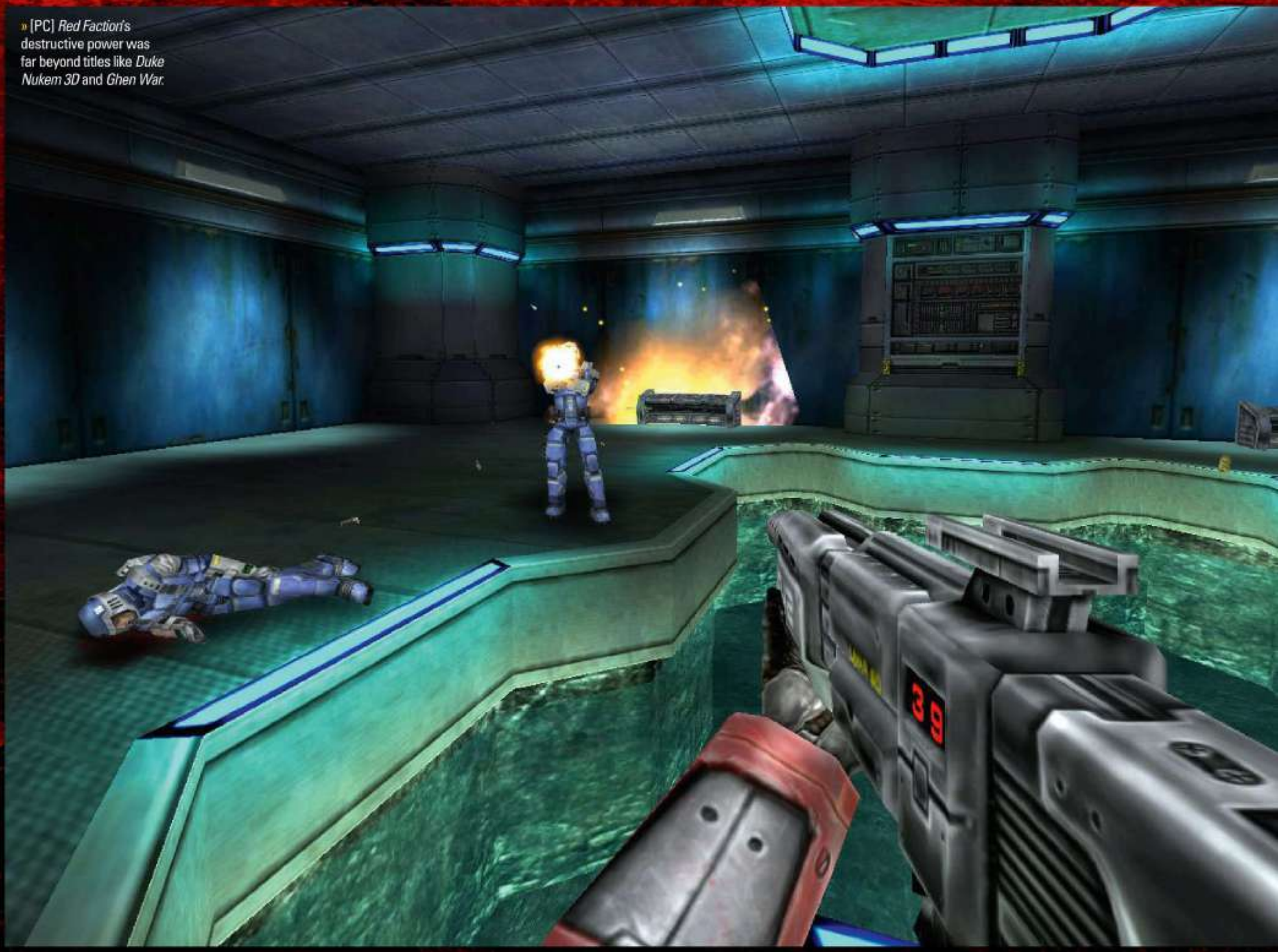
» **GENRE:** FIRST-PERSON SHOOTER

DEVELOPER HIGHLIGHTS

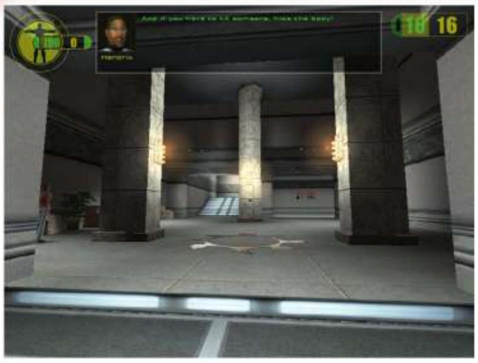
DESCENT
SYSTEM: MS-DOS, PLAYSTATION
YEAR: 1995

SUMMONER
SYSTEM: MS-DOS, PLAYSTATION
YEAR: 2000

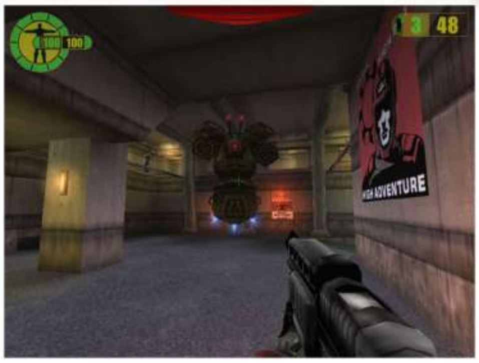
SAINTS ROW (PICTURED)
SYSTEM: XBOX 360, MOBILE
YEAR: 2006



» [PC] *Red Faction's* destructive power was far beyond titles like *Duke Nukem 3D* and *Ghen War.*



» [PC] Some areas were stealth-orientated, requiring you to sneak around Ultor's offices unseen by cameras and guards.



» [PC] As you progressed through Ultor's facilities, you would find yourself coming up against more powerful enemies than standard guards.

When you think of videogame destruction, *Red Faction* most likely comes to mind. Its inception came from Parallax Studio, now Volition, and its desire to create a fourth entry in its *Descent* series, "We felt making another *Descent* sequel just made sense. One of the key ideas we had was a destructible environment. That was a core idea from the get-go," comments *Red Faction*'s lead designer, Alan Lawrance. While past games had allowed for limited pre-scripted alterations, or special triggered areas that would then add or remove certain geometry, Alan and his team sought to allow players to alter any level at any time. "We knew that destructible environments was a tall order because games hadn't done it before." This was a watershed moment for game development – fully destructible, unscripted level alteration far beyond the likes of *Ghen War*, *Blood II* and *Duke Nukem 3D*. The team's ambition meant *Red Faction* would become a benchmark for videogame destruction in the years to follow.

» Alan Lawrance is technical director at Dry Cactus and lead programmer on its *Poly Bridge* franchise.

During *Red Faction*'s initial development, it became clear to the team that *Descent*'s third-person perspective and jetpack controls were on their way out, and a new style was beginning to dominate the industry. "Around that time, FPS games were becoming more and more popular – people weren't playing with joysticks like *Descent* had, they were using a keyboard and mouse, explains Alan." The team embraced the new form and *Red Faction* became Volition's first-ever first-person shooter, joining the likes of *Alien: Resurrection* and *Halo: Combat Evolved* by becoming one of the first console FPS games to use dual analogue sticks.

> "WE KNEW THAT DESTRUCTIBLE ENVIRONMENTS WERE A TALL ORDER BECAUSE GAMES HADN'T DONE IT BEFORE"
> **ALAN LAWRANCE**

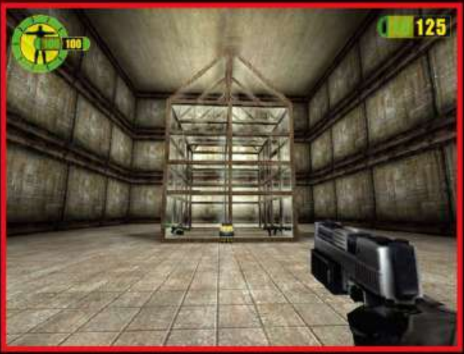
Some of *Descent 4*'s story elements were transferred over to *Red Faction*, including the main character of Parker and the setting on Mars – *Red Faction*'s basic plot sees Parker join the miner revolution against the exploitative Ultor Corporation, leading the charge in their endeavour to escape to a better life. Although this linear, story-driven FPS with an emphasis on destruction was new territory for the team, they were efficient in ensuring that building *Red Faction*'s engine didn't begin from square one, "We had developed a game called *FreeSpace*, a space sim that's nothing like an FPS, but when you develop a game with a custom engine, there are a lot of components that can be reused no matter what," says Alan. Influences from *FreeSpace* can be best seen in *Red Faction*'s moments of vehicular-focused level design and combat, such as fighting other combat submarines to reach an underwater laboratory.

Red Faction is built on the Geo-Mod engine, short for geometry modification, which allows the player to make real-time alterations to most of the game's terrain – if there's a wall, you can make a hole and shoot through it; if a car is passing over a bridge, you can shoot out its road and cause it to fall. It invited a level of player interactivity that hadn't really been seen before in videogames, and was a remarkably complicated process, "It was what we called a real-time subtractive Boolean – we'd take a Geo-Mod shape, like the explosion that's intersected with the world itself," Alan says. "There's a whole lot of math that goes on and finding out where the faces intersect with the shape, and then which faces should be removed, which faces should be reconstructed to accept the mesh. And from that, you have a hole." The engine's mathematics took around four months, and was headed up by programmer John Slagle – once he had shown the team that such an engine was possible to integrate into a videogame world, the team got to work with designing around it.

However, when you make a hole in the wall in *Red Faction*, you're not just affecting the terrain – you're affecting fundamental layers of the level's design. "There's a big ripple effect that affects more than just the geometry – it affects AI, collision, actual visual effects and many other systems in the game." Alan concedes that perhaps the team didn't fully grasp the scope that a singular Geo-Mod alteration could have on ▶

DON'T THROW STONES

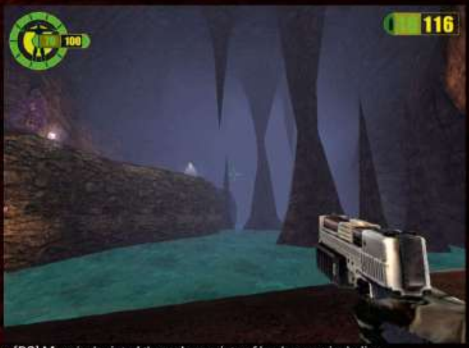
INSIDE RED FACTION PC'S DESTRUCTIVE SANDBOX OF DELIGHTS



The PC edition of *Red Faction* contained an exclusive level which allowed players to experiment with the full capabilities of the Geo-Mod engine. Titled Glass House, after the literal house within it, the sandbox tech demonstration has fully destructible walls, floors and ceiling with a variety of weapons including remote charges, a rocket launcher and an assault rifle.

It's within this tech demonstration that the true revolutionary applications of the Geo-Mod engine can be explored – players can create long, winding tunnels around the entire area; they can also witness the detailed textures of how glass reacts to bullet holes, shattering into thousands of pieces that rain down upon you. Technically, there is a memory limit to the extent of how far you can tunnel throughout Glass House – however, the advantage of the level's PC exclusivity enables players to manually raise their level through modifying their game.

Players can also get a deeper understanding of the ripple effect the Geo-Mod engine can cause on the rest of the game, as Alan mentions – for example, if you're wearing armour when glass shards rain down on the player, they'll be unscathed. However, when no armour is protecting you, the glass shards can actually inflict damage upon Parker.

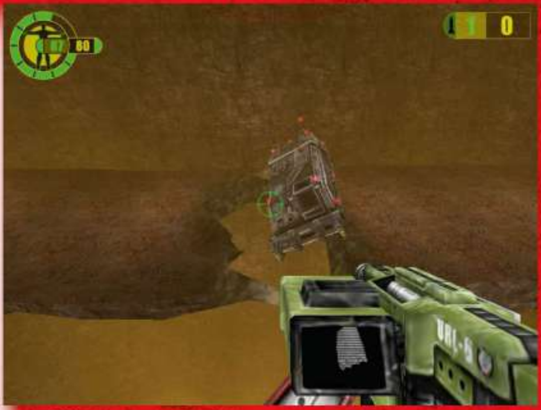


» [PC] Mars is depicted through a variety of landscapes including ancient, labyrinthine caves underneath Mars' surface.

▶ an entire level. "It caught us a little off guard," he admits. Take, for example, the seemingly simple action of rocketing a wall to create a hole in it, "An AI then has to adjust its pathfinding, or suddenly the player will have to be able to shoot through it, and then there's also unexpected problems like AI getting stuck in a hole," Alan explains. *Red Faction*'s world was rendered on a portal-based engine – essentially seeing through doors – so the game didn't need to render the entire level at once, thereby reducing memory usage. However, a new hole is also suddenly a new, dynamic portal; something the game needs to both recognise and set up instantaneously. "It's a real load of math and computation to do this, and that was especially tough on the PS2 because you're talking about a system with a hard limit of memory," says Alan.

As the team realised early on, making your entire game world destructible isn't the most feasible of objectives, especially when you're developing a linear story-driven game, "If you let the player go anywhere at any time in any direction, that'd be a different kind of game, more like a sandbox than a linear FPS," Alan continues. Initially, every area in *Red Faction* was destructible by default, with designers like Alan manually defining certain areas as indestructible in order to ensure players could progress unimpeded. Although they knew that having an entire world that could be altered at any moment would be revolutionary, "The idea was something we struggled with a lot, because the more destruction you allow, the more scripting complications you created by ensuring a player follows a linear path." What the team compromised on was a sense of meaningful destruction – player-based alterations would therefore be predicated by a reason: a hole in the wall could surprise a group of soldiers, or a gap across a bridge can prevent enemies from reaching you. They had blended destruction into *Red Faction*'s game mechanics and overarching narrative, ensuring it never became a momentary gimmick.

R*ed Faction* would go on to become a runaway hit, selling over one million copies within a year – the Geo-Mod technology was lauded as a groundbreaking innovation in videogame development, championing *Red Faction* as a technical marvel. So, with so many classic titles receiving celebratory remasters and franchise-restarting reboots; why hasn't the original *Red Faction* received similar treatment? "I think it would be hard to be rebooted because I think the techniques of destruction have moved on from the Geo-Mod concept," says Alan. "Just look at *Red Faction: Guerrilla* – it didn't use Geo-Mod. It used what I'd call precomputed destruction." *Guerrilla*'s engine focused instead on ragdoll physics simulation, with a 'shardifying' process – it was a completely different direction for *Red Faction*'s destruction. "It didn't evolve from a *Red Faction* engine – it was actually a different game that never saw the light of day at Volition," continues Alan. "They felt that the visual of a building collapsing with thousands of debris pieces would be more satisfying than making holes in the walls. But actually, a lot of people really enjoyed doing just that – making holes in the walls."



» [PC] As Alan mentions, Geo-Mod meant players could directly manipulate AI pathfinding to give them an advantage.

» [PC] There's a lot of purposeful symbolism and iconography that calls back to the Russian Revolution across the game.

BEYOND MARS

HOW RED FACTION'S FUTURE PLAYED OUT

RED FACTION II

2002

■ ***Red Faction*'s sequel saw Alan take over as lead programmer, learning from the difficulties of the original – *Red Faction II*'s world was indestructible by default, and instead Geo-Regions were brought in: these were specifically selected areas of levels that invited meaningful destruction. This made development of the sequel a lot more straightforward.**

RED FACTION: GUERRILLA

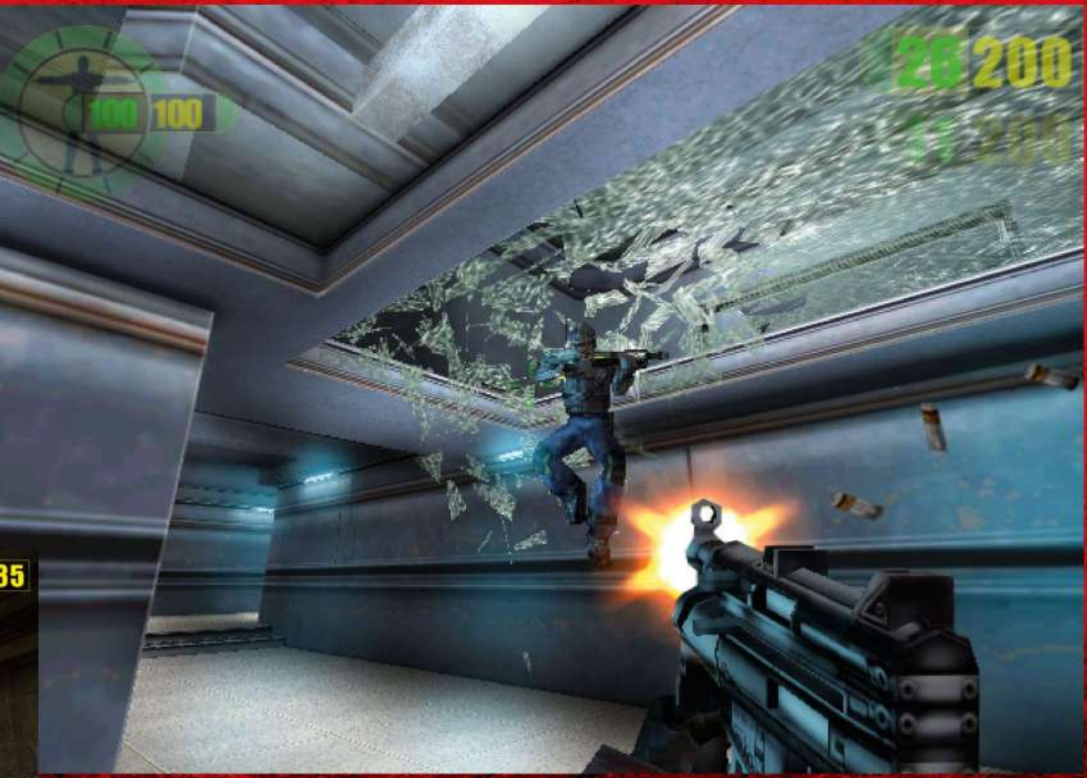
2009

■ ***Red Faction: Guerrilla* was actually built on the engine of an unrealised Volition project rather than upgrading the Geo-Mod engine to the next generation. Terrain was no longer destructible as the team shifted their focus to a stress-based collapse model where buildings and cover would react in real-time to damage through a process of 'shardifying'.**

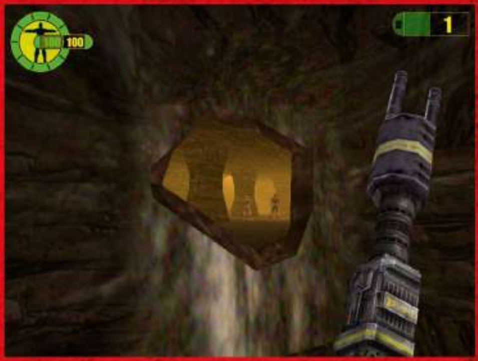
RED FACTION: ARMAGEDDON

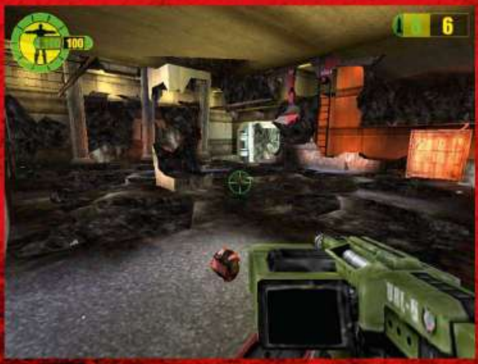
2011

■ **The last *Red Faction* game would build on *Guerrilla*'s engine, now offering the players the ability to repair their destruction through the Nano Forge – this would allow them to repair structures like stairs, reverse-engineering the meaningful destruction of the original game to provide a sense of meaningful reconstruction.**



» [PC] Just as you could use the Geo-Mod engine to your advantage, enemies could break glass windows and ceilings to catch you by surprise.

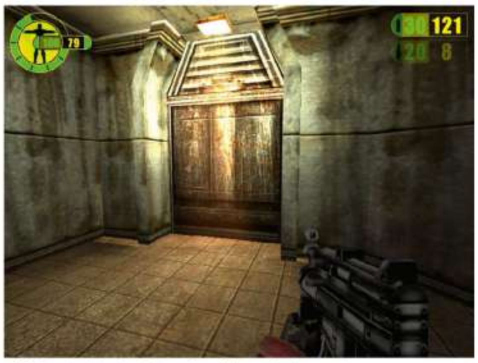




» [PC] The level of destruction offered to the player by the Geo-Mod engine allowed some rooms to be completely obliterated.

One of the reasons that Alan believes the *Red Faction* franchise saw stagnation in the years following was down to the change in creative direction after *Red Faction 2* – "I think they should've doubled down on what made *Red Faction* so groundbreaking, rather than going forward in a different direction. *Guerrilla* and *Armageddon* weren't even first person, so at that point, is it really even a *Red Faction* game without the notion of destruction?" he ponders. *Red Faction: Armageddon*'s disappointing loss led to THQ outright cancelling the *Red Faction* franchise in 2011. Since then the once iconic, groundbreaking title has laid dormant, with only a digital re-release of the original and a remaster of *Red Faction: Guerrilla* by new owners THQ Nordic in 2018 giving any indication that there still might be some interest in continuing the series.

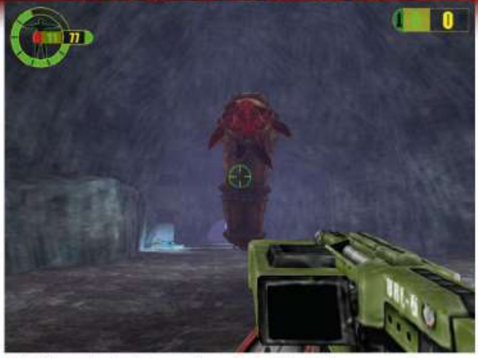
> "IS IT EVEN REALLY A RED FACTION GAME WITHOUT THE NOTION OF DESTRUCTION?"
> **ALAN LAWRANCE**



» [PC] The dark, industrial factories of Ultor make for some intense, close-quarters combat where you have to shoot first, think second.

At the time, *Red Faction*'s developers seemed incredibly excited about Geo-Mod's potential future in not just their own franchise, but its effects on the industry as a whole – and yet, despite the titles of 'groundbreaking' and 'revolutionary', nothing happened. Ultimately, that may be because of the very challenge Alan faced when designing *Red Faction*, "How do you marry gameplay concepts with destruction and have them complement one another?" Instead, developers seemed to pivot away from focusing on experimental new gameplay mechanics, and an obsession with visuals seemed to take over. "I think in some ways, it's easier to make the game pretty than to make it fun. So that's where visuals get more value or perceived importance, and so development effort often goes toward that – which I think is backwards. Gameplay should always come first." It's difficult for franchises like *Red Faction* to be resurrected in the current state of the industry, where epic, expansive open worlds that look photorealistic are touted as the pinnacle of videogame development – and yet, these worlds struggle to innovate on 21-year-old ideas.

However, that isn't to say games have completely abandoned meaningful destruction – titles like *Minecraft* and *Teardown* are great examples that Alan himself mentioned as reminding him of the ideas they tinkered with in *Red Faction*. "I think the idea of destruction in gameplay is still out there – no one did anything with what *Red Faction* brought to the table for a long, long time but now we're starting to see these ideas emerge again."



» [PC] You could also find yourself running into Mars' indigenous species, somewhat ticked off that you've colonised their planet for Earth's gain.

It's clear that *Red Faction* has left a strong legacy within the videogame industry both player-side and developer-side – it remains one of the shining examples of how marrying innovative game design and story can work to push the boundaries of development in the pursuit of something memorable. "I think the Geo-Mod engine was definitely groundbreaking technology – it created something that was challengingly new and original. I think when people think of destruction in games, *Red Faction* comes to a lot of people's minds, so I think it has a legacy of being of the first videogames to allow destruction in a meaningful way." But for Alan, what's truly meaningful to him is the impact it left on those that played it, "It's just amazing to hear from people on Twitter, *Red Faction* subreddits and Discord mentioning they played it as a kid, and that they still remember it today. It's one of the reasons why I keep doing what I do, because I know there's people out there who see my work, and it means something to them." ★

CLASSIC MOMENTS

Street Fighter Alpha 3

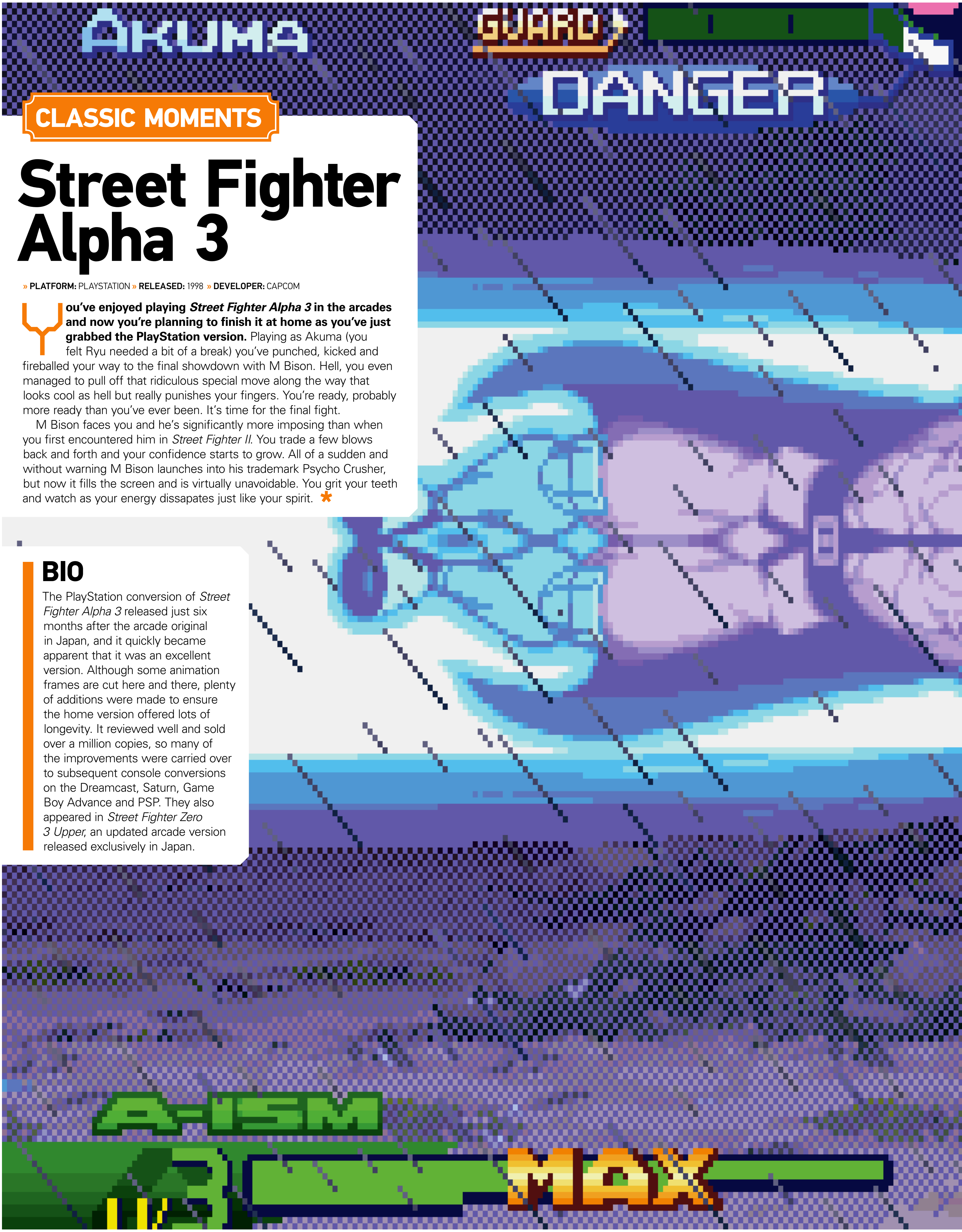
» **PLATFORM:** PLAYSTATION » **RELEASED:** 1998 » **DEVELOPER:** CAPCOM

You've enjoyed playing *Street Fighter Alpha 3* in the arcades and now you're planning to finish it at home as you've just grabbed the PlayStation version. Playing as Akuma (you felt Ryu needed a bit of a break) you've punched, kicked and fireballed your way to the final showdown with M Bison. Hell, you even managed to pull off that ridiculous special move along the way that looks cool as hell but really punishes your fingers. You're ready, probably more ready than you've ever been. It's time for the final fight.

M Bison faces you and he's significantly more imposing than when you first encountered him in *Street Fighter II*. You trade a few blows back and forth and your confidence starts to grow. All of a sudden and without warning M Bison launches into his trademark Psycho Crusher, but now it fills the screen and is virtually unavoidable. You grit your teeth and watch as your energy dissapates just like your spirit. *

BIO

The PlayStation conversion of *Street Fighter Alpha 3* released just six months after the arcade original in Japan, and it quickly became apparent that it was an excellent version. Although some animation frames are cut here and there, plenty of additions were made to ensure the home version offered lots of longevity. It reviewed well and sold over a million copies, so many of the improvements were carried over to subsequent console conversions on the Dreamcast, Saturn, Game Boy Advance and PSP. They also appeared in *Street Fighter Zero 3 Upper*, an updated arcade version released exclusively in Japan.



GUARD
M.BISON

MORE CLASSIC STREET FIGHTER ALPHA 3 MOMENTS

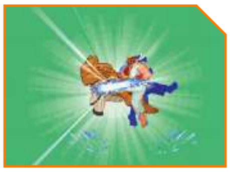
Grab A Friend

We've already mentioned that M Bison is a bit of a pig to defeat, but there is a sneaky way to turn the tables on him. If you play Dramatic Battle mode, you can take M Bison on with a friend (a real one or an AI partner). It's tremendous fun and you'll soon forget earlier defeats as you give him the kicking he truly deserves.

Rivalries Reignited

Turning on *Street Fighter Alpha 3*, you'll quickly discover that the PlayStation version has quite a few characters that didn't appear in the arcade game. In fact, the additions make it the first game in the *Alpha* series to include the full *Super Street Fighter II Turbo* cast, ensuring that everyone can easily dive in with their old favourites.

Flashy Finish



While it's by no means new to the series, the background effect you get when finishing an enemy with a super move is still ever so satisfying. In *Street Fighter Alpha 3*, it's colour coded depending on the fighting style you choose – red for X-ism, blue for Y-ism and green for A-ism (or Z-ism, for those playing the Japanese version).

World Warrior

RYU
LV 5
A-ISM LV
HONG KONG

Less of a moment and more of a whole mode, the World Tour mode of *Street Fighter Alpha 3* is a significant addition in which you face various fighting missions, such as two-on-one fights or matches in which only combo hits deal any damage. Along the way, you'll train your fighter and earn extra abilities.

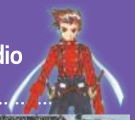
TOP 25 GAMECUBE GAMES

THE GAMECUBE HAS JUST HIT ITS 20TH ANNIVERSARY IN EUROPE, SO TO CELEBRATE, WE ASKED RETRO GAMER READERS TO VOTE FOR THEIR FAVOURITE GAMES. THE RESULTS ARE IN – DID YOUR FAVOURITE MAKE THE CUT?

WORDS BY NICK THORPE

NINTENDO
GAMECUBE
START/PAUSE

25 Tales Of Symphonia



■ DEVELOPER: **Namco Tales Studio**
■ GENRE: **RPG** ■ YEAR: **2003**

■ Lloyd's quest to save Sylvarant is a pretty standard RPG plot, but the first of the *Tales* series to make it to Europe impressed players with its lovely cel-shaded graphics and excellent battle system.

24 Skies Of Arcadia Legends

■ DEVELOPER: **Overworks**
■ GENRE: **RPG** ■ YEAR: **2002**

■ Sega's sky-sailing RPG was already a classic on the Dreamcast, but this GameCube port is the definitive edition thanks to fewer random battles, brand-new sidequests and improved technical performance.

23 Pikmin 2

■ DEVELOPER: **Nintendo EAD**
■ GENRE: **Strategy** ■ YEAR: **2004**

■ Building on the excellent original, Captain Olimar's second outing ditches the time limit, improves AI and introduces new white and purple Pikmin, which resist poison and are super strong respectively.

22 Metal Gear Solid: The Twin Snakes

■ DEVELOPER: **Konami/Silicon Knights**
■ GENRE: **Stealth** ■ YEAR: **2004**

■ This remake of *Metal Gear Solid* divides opinions – some love the updated graphics and new mechanics, some hate the new audio and flamboyant cutscenes. At its core, it's still a classic stealth experience.

21 Metroid Prime 2: Echoes

■ DEVELOPER: **Retro Studios**
■ GENRE: **Action adventure** ■ YEAR: **2004**

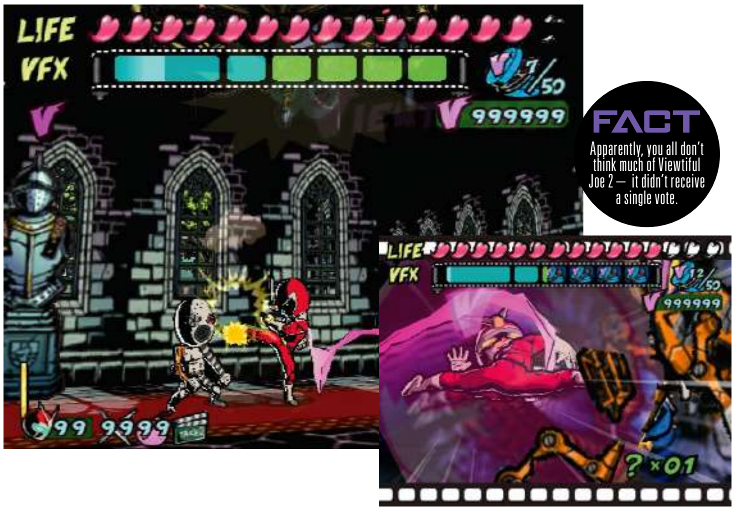
■ The addition of multiplayer fell surprisingly flat, but Retro Studios' second outing with Samus retains plenty of the best qualities of the original – it's just a bit harder and considerably more purple.

HENSHIN-A-GO-GO BABY!

20 VIEWTIFUL JOE

■ DEVELOPER: Capcom Production Studio 4 ■ GENRE: Action ■ YEAR: 2004

Announced as part of a selection of GameCube games that came to be known as the Capcom Five, *Viewtiful Joe* is one of the system's most stylish and inventive games. After Joe and his girlfriend are pulled into Movieland while watching a film, Joe has to venture through seven beat-'em-up stages with platform and puzzle elements in order to rescue her. Fortunately, he gains the ability to transform into a superhero to help with this mission. Apart from the lovely cel-shaded visuals, the film inspiration extends to many of Joe's special VFX Power abilities, which emulate camera effects and can be used in inventive ways to alter the flow of combat.



FACT

Apparently, you all don't think much of Viewtiful Joe 2 – it didn't receive a single vote.

ACTION! JOE'S VFX POWERS, AND WHAT THEY'RE USED FOR

Slow

■ Slow motion is a classic film technique, and here it helps Joe to avoid attacks – not only are they easier to dodge, but he can deflect bullets and more. In this state, enemies can be knocked into one another for collateral carnage too, earning you better battle ratings.

Mach Speed

■ If Joe needs to cross the screen quickly, this is the technique he'll need to use. Speeding things up in combat might seem counterproductive, but Joe's rapid-fire attacks will gain multiple after-images, and he can even shield himself from heat attacks.

Zoom

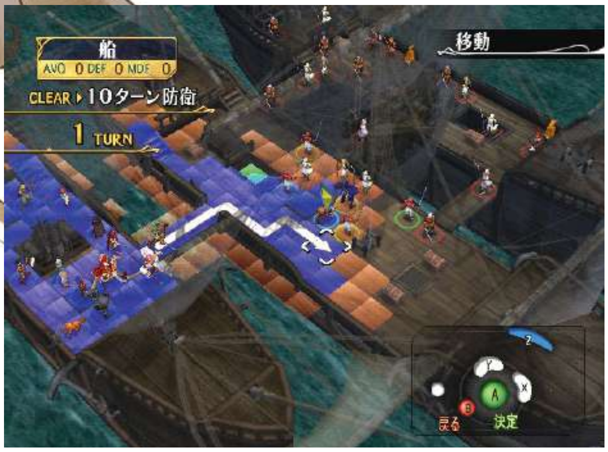
■ Bringing the action closer to Joe gives him a set of flashy new attacks, all of which do some major damage to the bad guys. A flurry of fists, a devastating spinning kick, a corkscrew jump – all of these things are possible in Zoom, and they're viewtiful.

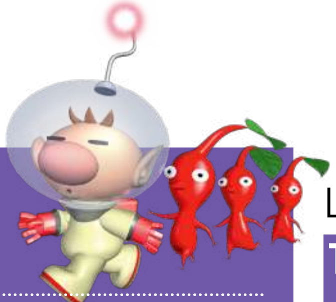
OUT OF **OBSCURITY**

19 FIRE EMBLEM: PATH OF RADIANCE

■ DEVELOPER: Intelligent Systems ■ GENRE: Tactical RPG ■ YEAR: 2005

At the beginning of the generation, *Fire Emblem* was an unknown quantity to most Nintendo fans outside of Japan, seen only in *Super Smash Bros Melee*. However, in its homeland the series has long been enjoyed for its combination of tactical battles and fantasy storytelling. Fans who stayed loyal to the system were rewarded with the chance to play the first 3D entry in the series, an excellent effort from Intelligent Systems which sees you attempting to thwart the Daein invasion of Crimea and restore its exiled princess to the throne. As a late release, it's now a rare and expensive game – complete copies go for £175+ today. ▶



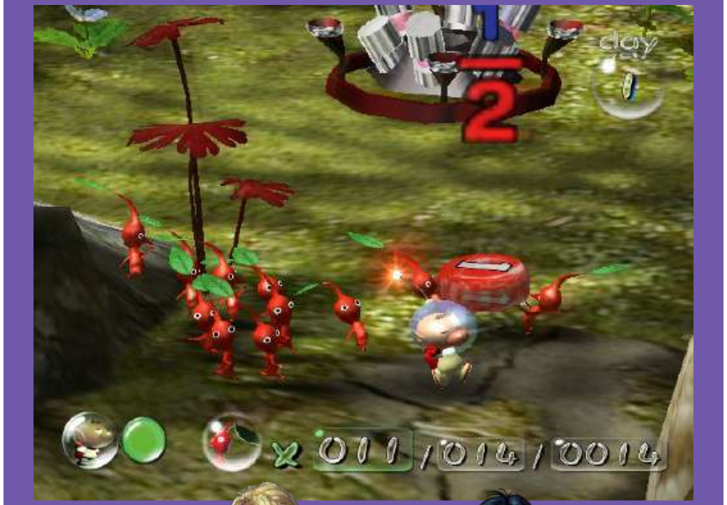


A QUICK **PIK-ME-UP**

18 PIKMIN

■DEVELOPER: **Nintendo EAD** ■GENRE: **Strategy** ■YEAR: **2001**

With many first-party GameCube games elaborating on their N64 predecessors, *Pikmin* was a new concept that felt like a real breath of fresh air. As Captain Olimar, you've got 30 days to rebuild your spaceship, and you're reliant on the odd titular creatures to help you find them. The way you command various Pikmin is reminiscent of war games, but with the signature family friendly Nintendo twist.



LIFE IN THE **SLOW LANE**

16 ANIMAL CROSSING

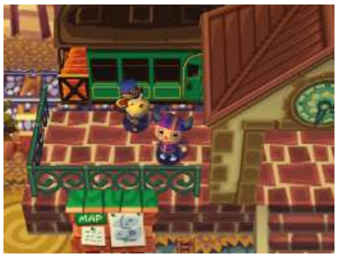
■DEVELOPER: **Nintendo EAD** ■GENRE: **Life simulation** ■YEAR: **2001**

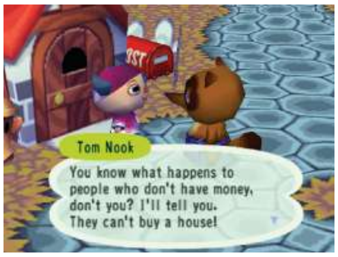
■ ***Animal Crossing* was originally released for the N64 in Japan only – this GameCube edition is an enhanced port of that original version.**

■ Despite being one of the earliest Japanese GameCube releases, Nintendo didn't release *Animal Crossing* in Europe until September 2004.

■ **The North American version had e-Reader functions, allowing you to unlock extra NES games. The e-Reader wasn't released in Europe.**

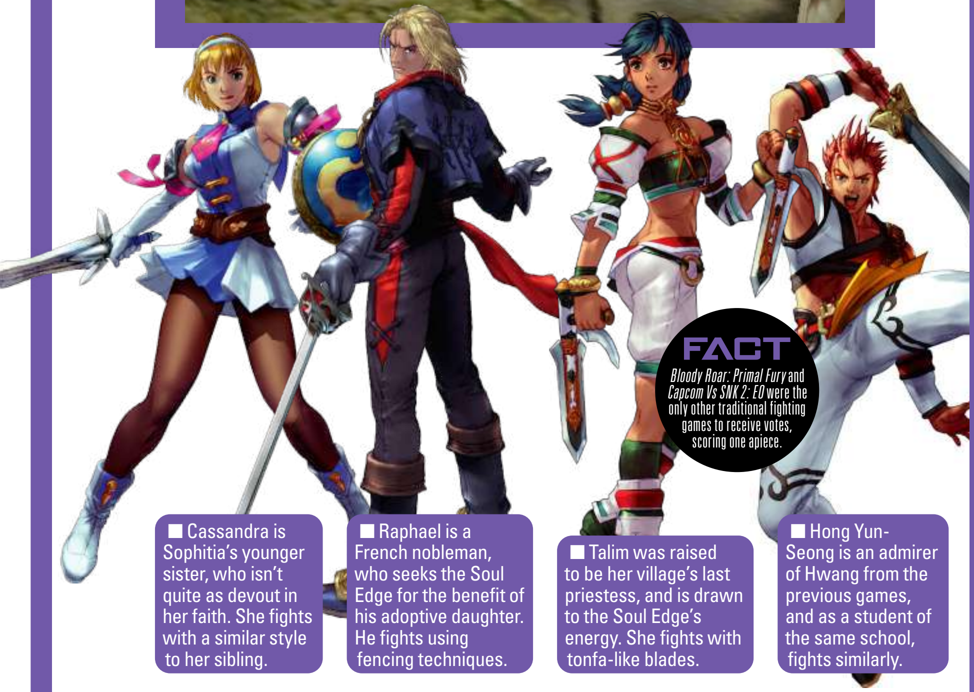
■ Tom Nook gives interest-free mortgages with no repayment schedule. We apologise for any previous suggestions that he is a crook.





Tom Nook

You know what happens to people who don't have money, don't you? I'll tell you. They can't buy a house!



FACT

Bloody Roar: Primal Fury and *Capcom Vs SNK 2: EO* were the only other traditional fighting games to receive votes, scoring one apiece.

■ Cassandra is Sophitia's younger sister, who isn't quite as devout in her faith. She fights with a similar style to her sibling.

■ Raphael is a French nobleman, who seeks the Soul Edge for the benefit of his adoptive daughter. He fights using fencing techniques.

■ Talim was raised to be her village's last priestess, and is drawn to the Soul Edge's energy. She fights with tonfa-like blades.

■ Hong Yun-Seong is an admirer of Hwang from the previous games, and as a student of the same school, fights similarly.

NEW FORMAT, **NEW FACES**

17 SOULCALIBUR II

■DEVELOPER: **Project Soul** ■GENRE: **Fighting** ■YEAR: **2003**

Just like its predecessor, *Soulcalibur II* is a superb weapons-based 3D fighting game featuring some of the very best graphics on the console. It's a great game on any system, but the exclusive inclusion of *Zelda*'s Link had players flocking to the GameCube version. Four more fighters (above) also debuted.

CARD CARRYING **ADVENTURER**

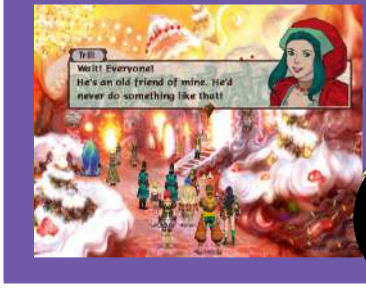
15 BATEN KAITOS:

ETERNAL WINGS AND THE LOST OCEAN

■DEVELOPER: **Monolith Soft/Tri-Crescendo**
■GENRE: **RPG** ■YEAR: **2003**

Card games seemed to be all the rage during the GameCube era, as quite a few games picked up card mechanics to varying degrees of success – *Lost Kingdoms* sadly didn't make this list despite being great, whereas *Phantasy Star Online Episode III: CARD Revolution* was not the sequel fans had expected. According to you lot, *Baten Kaitos* is the very best of the bunch, and it's not hard to see why you've reached that conclusion.

You guide Kalas, a young man whose goal in life is to gain revenge for the killing of his brother and grandfather. He quickly finds himself wrapped up in much larger problems, and ends up joining up with others to adventure across a variety of weird and wonderful locations such as picture book towns and places made of sweets. The battle system is compelling, but it's the game's unique sense of style that really sets it apart from other RPGs of the era and on the GameCube.



Trill

Wait! Everyone!
He's an old friend of mine. He'd never do something like that!

FACT

Baten Kaitos Origins almost made this list too, finishing 26th – likely hampered by its lack of a PAL release.

14 Paper Mario: The Thousand-Year Door

■ DEVELOPER: **Intelligent Systems**
■ GENRE: **RPG** ■ YEAR: **2004**

■ The original *Paper Mario* was beloved for its unique art style, light-hearted story and its use of active elements in turn-based battles. This sequel retains those qualities and is arguably the most-beloved game in the *Paper Mario* series – which is probably why it's so expensive now.

13 The Legend Of Zelda: Twilight Princess

■ DEVELOPER: **Nintendo EAD**
■ GENRE: **Action adventure** ■ YEAR: **2006**

■ Most players enjoyed this on the Wii, which is probably why it didn't place higher, but *Twilight Princess* was a fine swan song for the dinky purple box. The darker take on the *Zelda* world provided an unforgettable atmosphere, married to the series' standard stellar game design.

12 Super Monkey Ball

■ DEVELOPER: **Amusement Vision**
■ GENRE: **Action** ■ YEAR: **2001**

■ This masterpiece of minimalist game design tasks you with guiding AiAi and friends through devilish obstacle courses with only the analogue stick. It's equally compelling and infuriating alone or with friends, and the Monkey Target minigame only adds multiplayer longevity.

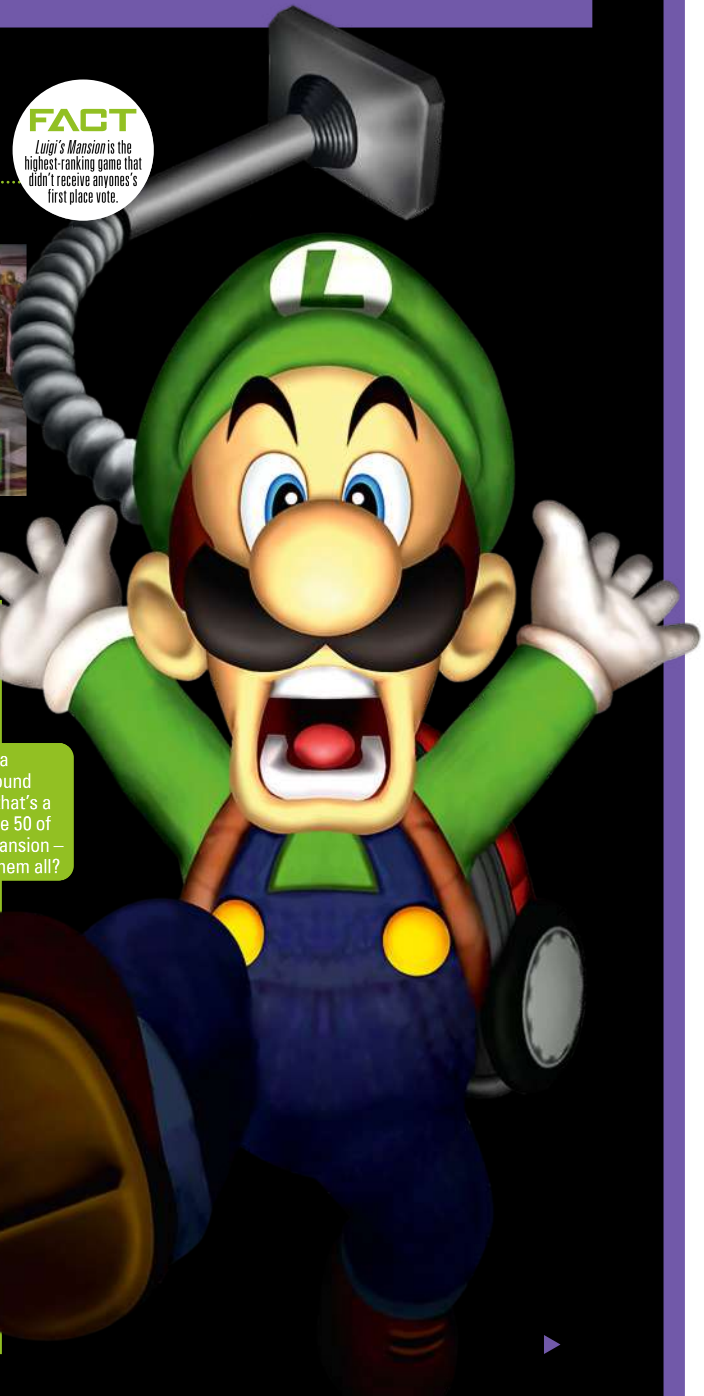
WHO YOU **GONNA CALL?**

11 LUIGI'S MANSION

FACT
Luigi's Mansion is the highest-ranking game that didn't receive anyones's first place vote.

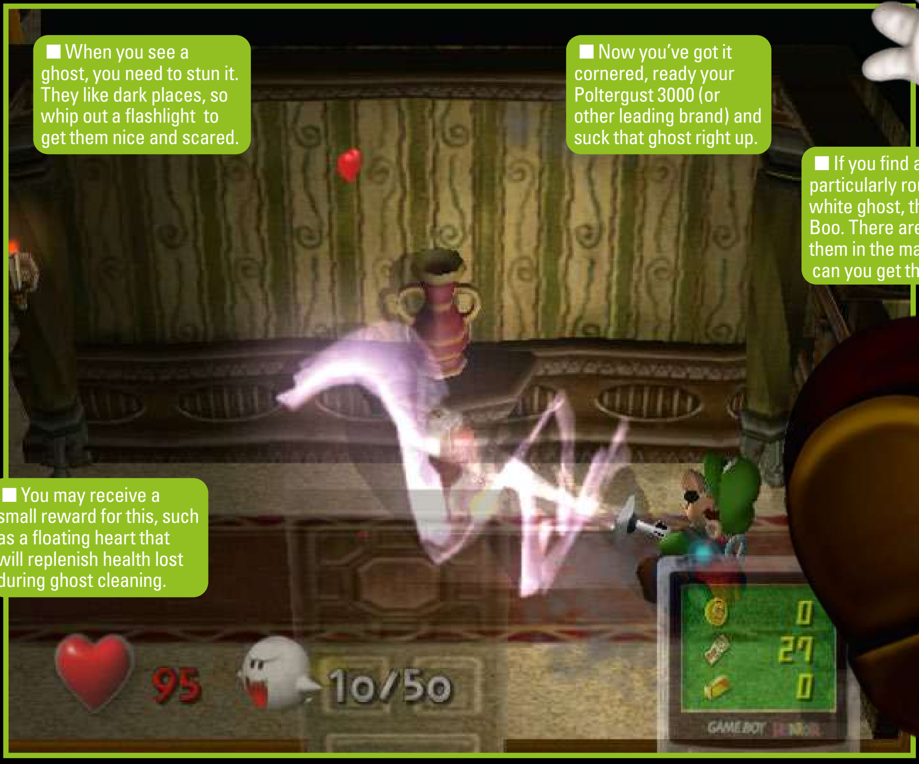
■ DEVELOPER: **Nintendo EAD** ■ GENRE: **Action adventure** ■ YEAR: **2001**

Luigi has won a mansion! There are only a few snags – he never entered the competition for it, it's full of ghosts and Mario has gone missing. Rescuing him involves wandering around the mansion with a vacuum cleaner, the Poltergust 3000, and hoovering up the spectral menaces. Players had expected a traditional Mario platformer at launch, but *Luigi's Mansion* accounted for itself well with an unexpected gameplay style and some great graphics, with particularly impressive lighting effects. It was a tad short, but so very sweet with it.



GHOST BUSTING GUIDE

STEP-BY-STEP INSTRUCTIONS ON HOW TO EXILE ECTOPLASM FROM YOUR MANSION



■ When you see a ghost, you need to stun it. They like dark places, so whip out a flashlight to get them nice and scared.

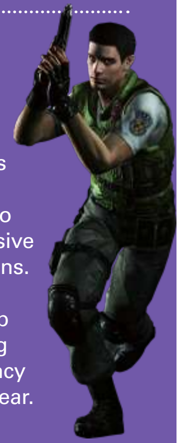
■ Now you've got it cornered, ready your Poltergust 3000 (or other leading brand) and suck that ghost right up.

■ If you find a particularly round white ghost, that's a Boo. There are 50 of them in the mansion – can you get them all?

■ You may receive a small reward for this, such as a floating heart that will replenish health lost during ghost cleaning.

10 Resident Evil

■ DEVELOPER: **Capcom Production Studio 4**
■ GENRE: **Survival horror** ■ YEAR: **2002**



■ Remaking a game as beloved as *Resident Evil* is hard, but Capcom provided a masterclass in how to do it right. The basic formula was kept intact, but everything was upgraded – the graphics were absolutely incredible, the audio was improved and new defensive weapons gave you extra options. Meanwhile, new sections and enemies were included to keep old fans on their toes, ensuring that familiarity and complacency didn't do anything to dull the fear.

09 Eternal Darkness: Sanity's Requiem

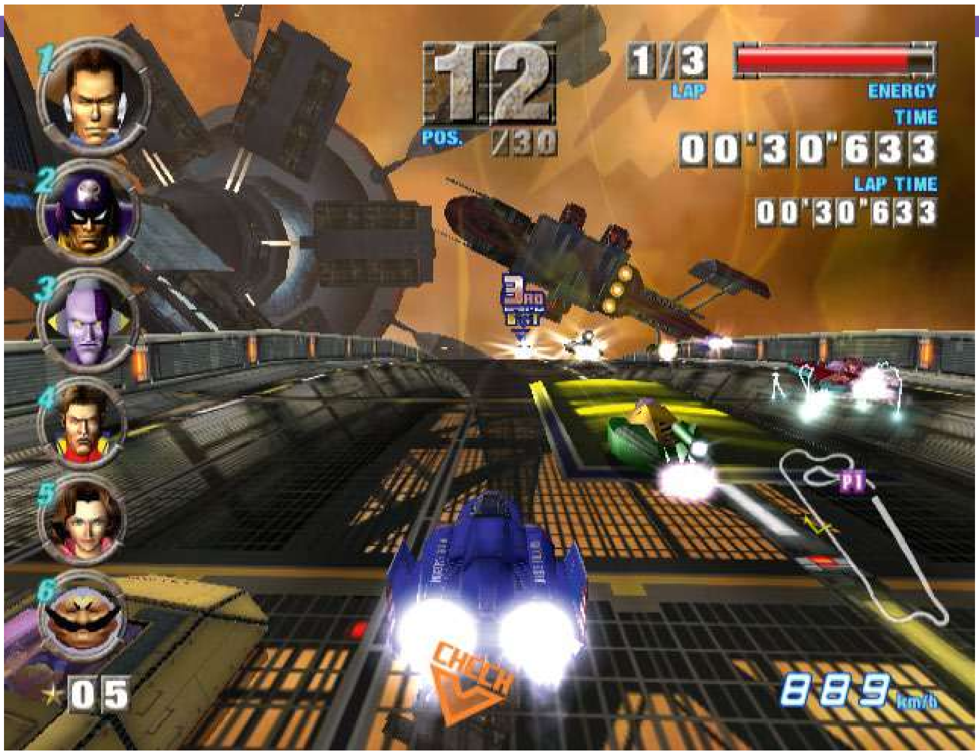
■ DEVELOPER: **Silicon Knights**
■ GENRE: **Action adventure** ■ YEAR: **2002**

■ Originally headed for the N64, this horror game presents a plot in which various characters become entangled in the machinations of eldritch beings over centuries. The Lovecraft-inspired story is well told and the game design is rock solid, but it's the Sanity System that makes *Eternal Darkness* so memorable. As your characters are maddened by their predicaments, the game will start to play on your fears as a player, often breaking the fourth wall.

08 Star Wars Rogue Squadron II: Rogue Leader

■ DEVELOPER: **Factor 5**
■ GENRE: **Action** ■ YEAR: **2001**

■ *Rogue Leader*'s path to greatness was simple – take the game design of N64 favourite *Star Wars: Rogue Squadron* and build upon it. Factor 5 went the extra mile, though. The game is packed with great movie moments, depicted with the most spectacular graphics seen in a *Star Wars* game to that point. What makes *Rogue Leader* especially impressive is that it was a launch game, and it doubtless inspired many early adopters to pick up their GameCubes.



UNLIKELY ALLIES **TRIUMPH**

07 F-ZERO GX

■ DEVELOPER: **Amusement Vision** ■ GENRE: **Racing** ■ YEAR: **2003**

Nintendo's decision to turn its iconic racing franchise over to long-time rival Sega initially raised eyebrows, but the result just raised pulses with its intensity, with its twisted tracks providing a fierce challenge. The detailed environments are amazing, but you won't have time to admire them thanks to the game's incredible speed, and the electronic soundtrack is the perfect accompaniment to the action. We'd love to see a new *F-Zero* one day, but besting *GX* would be a formidable challenge.

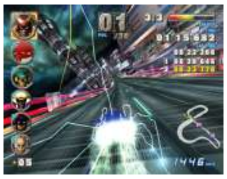
BLUE FALCON
BLUE FALCON
07
07

FACT

Two of Amusement Vision's four GameCube games made this list, and *Super Monkey Ball 2* narrowly missed joining them, placing 27th.

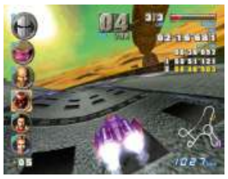
PLACES TO RACE

SOME OF THE SPECTACULAR SCENERY YOU'LL SPEED PAST



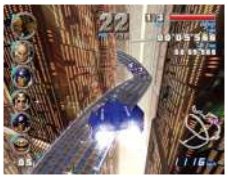
Mute City

■ *F-Zero*'s most iconic location, which now looks like the kind of bustling futuristic metropolis we'd like to call home.



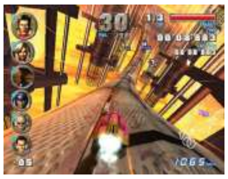
Sand Ocean

■ Few people inhabit this barren area – probably because of all the desert twisters, as well as the enormous sand worms.



Aeropolis

■ Big jumps are to be found on this racetrack, which weaves between the seemingly infinite number of high-tech towers here.



Fire Field

■ A hellish landscape of lava and pipework, in which only your vehicle protects you from a face full of hot ash.

ISLAND **ANTICS**

06 Super Mario Sunshine

■ DEVELOPER: **Nintendo EAD**
■ GENRE: **Platformer** ■ YEAR: **2002**

It's a bit of a shock to see a mainline Mario platformer fall outside of the top five, but *Super Mario Sunshine* has always been a bit of an oddity. The game sticks closely to the formula of *Super Mario 64*, but with more expansive stages and the new FLUDD machine that allows Mario to shoot water, hover and boost into the air. That's both a core strength and core weakness of the game – it's based on one of the greatest games ever, and few platform games can match it for the quality of its level design and objective structure. Some players expected more innovation though, and uncharacteristic technical rough edges hurt the overall experience. Still, even a slightly weak *Mario* game is better than the vast majority of games.

FACT

All of our previous Top 25 lists for Nintendo home consoles had *Mario* games in the top spot – *Super Mario Bros 3*, *Super Mario World* and *Super Mario 64*.

×00
LIFE
TIME
02:26:60
WATER

THE GAMECUBE'S **BIGGEST PARTY**

05 SUPER SMASH BROS MELEE

■ DEVELOPER: **HAL Laboratory** ■ GENRE: **Fighting** ■ YEAR: **2001**

The best-selling GameCube game of all time doesn't hit your top spot, but its high placing shouldn't come as a surprise. *Super Smash Bros Melee* not only added plenty of extra content over its N64 predecessor, it refined the fighting into a faster, more skill intensive style – one which has captivated fans and ensured that the game's competitive scene has survived far longer than many of its own successors. However, the party-oriented heart of the game ensures that it's not just for the obsessive.

04:46 63
23%
77%

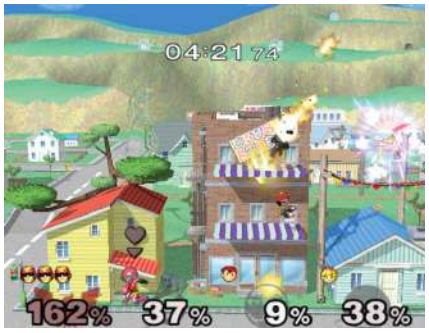
SMASHING FOR GLORY

FUN FACTS ABOUT THE COMPETITIVE SUPER SMASH BROS MELEE SCENE

■ Argentinian *Melee* pro Hungrybox has estimated tournament winnings of over $384,000 over 15 years of competitive play.

■ Despite the enduring popularity of *Super Smash Bros Melee*, the game wasn't featured at the Evolution Championship Series until 2007.

04:45 04
24%
61%
75%



■ The vast majority of stages are banned in tournament play, with only five being legal starter picks and one more legal as a counter-pick.

■ Swedish *Melee* pro Armada dropped out of Dreamhack Austin in 2017 because a controller wasn't malfunctioning how he wanted it to.

HOW MARIO KART DOUBLED THE FUN ON GAMECUBE

04 MARIO KART: DOUBLE DASH!!

■ DEVELOPER: **Nintendo EAD Tokyo**
■ GENRE: **Racing** ■ YEAR: **2003**

8th
TIME 00:40:233
LAP 1/3
55 mph

5th
TIME 00:39:9
LAP 1/3

■ **Each kart now has two drivers, allowing you to hold two items for increased tactical depth in combat**

■ Characters and vehicles are now chosen separately, based on the weight class of your driving team.

■ **New tracks like DK Mountain and Baby Park are some of the most popular in the history of the series.**

■ Battle Mode returns, with the excellent new Shine Thief and Bob-omb Blast rule sets joining Balloon Battle.

■ **LAN mode allows up to eight GameCubes to be networked together for multiplayer mayhem.** ▶

FACT

Mario Kart is a perennial favourite across platforms – we've run four Top 25 lists with eligible *Mario Kart* games, and they've all reached the top five.

SEE IT, SCAN IT, **SHOOT IT**

03 METROID PRIME

■ DEVELOPER: **Retro Studios** ■ GENRE: **Action adventure** ■ YEAR: **2002**

Metroid always sold better in America than it did Japan, so it made plenty of sense for Texas-based Retro Studios to take on the series for its first 3D outing. Despite a tricky development phase, the team absolutely knocked it out of the park, creating a whole new game that carried the essential *Metroid* spirit. Rather than being an out-and-out blaster, the game is a first-person adventure in which exploring and scanning your environment is the order of the day. That's not to say that combat is off the menu, of course – it's definitely there, it just isn't highly emphasised outside of the game's great boss battles.

MORE TO EXPLORE

SAMUS ARAN'S POST-PRIME ADVENTURES

METROID PRIME 2: ECHOES

■ Seen earlier in this list, this GameCube sequel sees Samus battling against the Ing and a mysterious mimic known as Dark Samus.

METROID PRIME: HUNTERS

■ With the DS touchscreen substituting for a mouse fairly effectively, this handheld outing was free to focus more on the combat than anything else.

METROID PRIME 3: CORRUPTION

■ Moving on to the Wii, Samus gained another new aiming method – the Wii remote's pointer. This was later collected in *Metroid Prime Trilogy*.

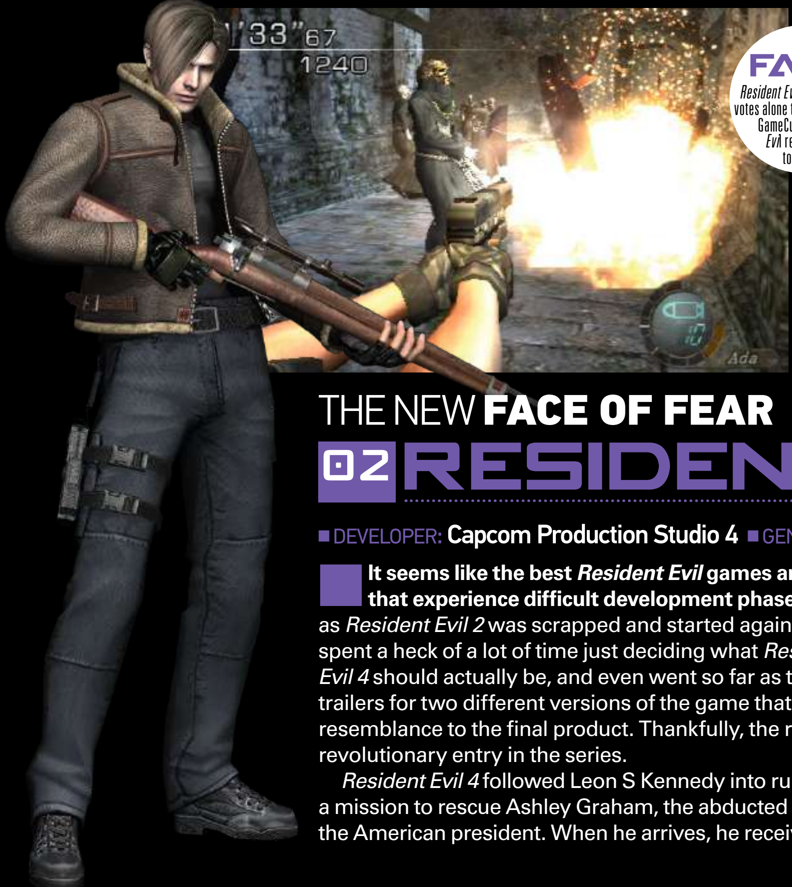
METROID PRIME: FEDERATION FORCE

■ A regular old marine is in the leading role here, rather than Samus herself. The change in emphasis didn't go down well with long-term *Metroid* fans.

FACT

Here's the breakdown of how the *Metroid Prime* games were represented in your votes:

Metroid Prime only: 40%
Both *Metroid Primes*: 9.5%
Metroid Prime 2 only: 3.5%
Neither: 47%



FACT

Resident Evil 4 gained more votes alone than all five other GameCube *Resident Evil* releases put together.

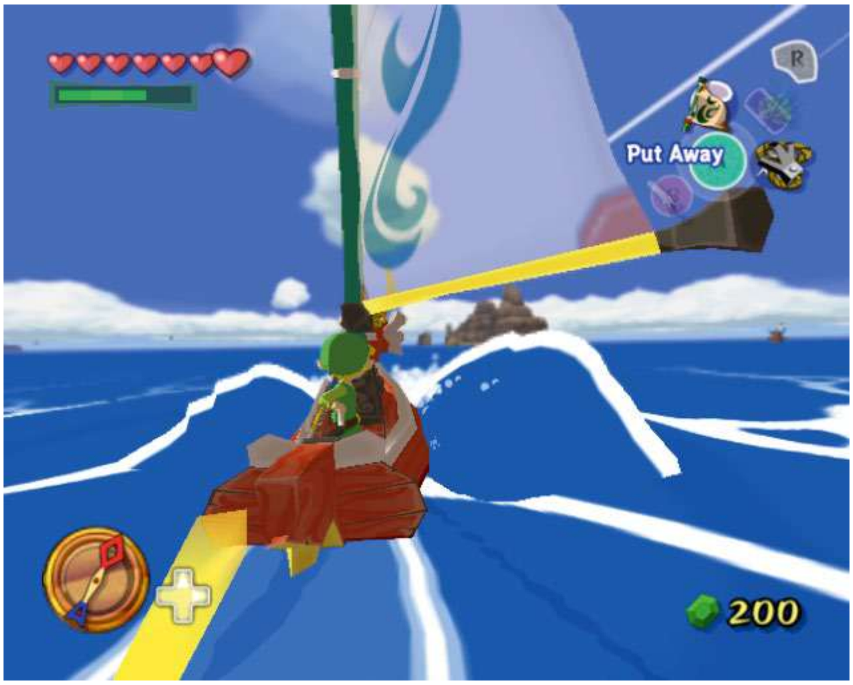
THE NEW **FACE OF FEAR**

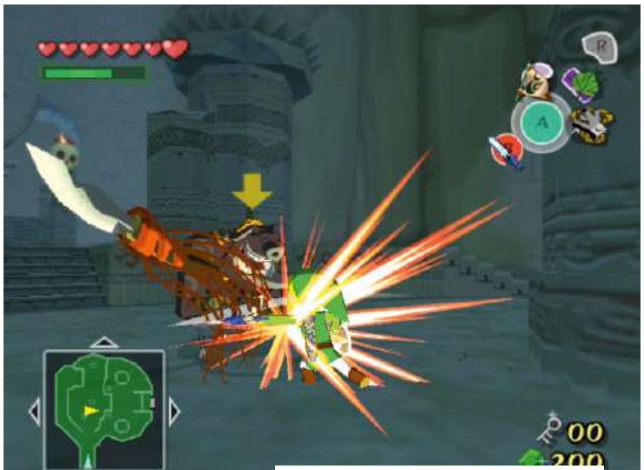
02 RESIDENT EVIL 4

■ DEVELOPER: **Capcom Production Studio 4** ■ GENRE: **Survival horror** ■ YEAR: **2005**

It seems like the best _Resident Evil_ games are those that experience difficult development phases. Just as *Resident Evil 2* was scrapped and started again, Capcom spent a heck of a lot of time just deciding what *Resident Evil 4* should actually be, and even went so far as to release trailers for two different versions of the game that bore no resemblance to the final product. Thankfully, the result was a revolutionary entry in the series.

Resident Evil 4 followed Leon S Kennedy into rural Spain, on a mission to rescue Ashley Graham, the abducted daughter of the American president. When he arrives, he receives a hostile reception from the locals, victims of the Los Illuminados cult. This sets up *Resident Evil 4* as a much more action-oriented game than its predecessors – although you benefit from improved combat controls and more plentiful ammunition, the fear factor is still present as you find yourself swarmed by enemies. They're not just bullet fodder either, refusing to just stand around and get shot like the zombies of old, dodging your shots and working together to hunt you down. Add exciting boss fights, dramatic QTE sequences and graphics that pushed the GameCube to its limits, and you have a game that is worthy of such a high placement in this list.





SET SAIL FOR **ADVENTURE**

01 THE LEGEND OF ZELDA: THE WIND WAKER

■ DEVELOPER: **Nintendo EAD** ■ GENRE: **Action adventure** ■ YEAR: **2003**

After establishing the 3D templates for so many of its key series on the N64, Nintendo used the GameCube sequels to refine and enhance them – something you can see in games like *Mario Kart: Double Dash!!* and *Super Mario Sunshine*. At the same time, for a famously conservative company, Nintendo did take some big risks in the GameCube era. It launched the console without a *Mario* game, handed third-party developers the keys to some of its prized franchises, and allowed drastic gameplay changes in series like *Metroid* and *Star Fox*.

It's fitting that you've voted *The Legend Of Zelda: The Wind Waker* the best GameCube game, because it exemplifies both Nintendo's boldness and its conservatism. The cel-shaded style of the game was certainly a daring and unexpected choice, and there's no getting around the fact that it received a mixed reception when it was unveiled. For some, it was a sign that Nintendo was out of touch in an era where conventional wisdom suggested that games needed to be darker and edgier to appeal to the masses. Decades down the line, it's hard to see what all the fuss was about because the game looks magnificent.

FACT

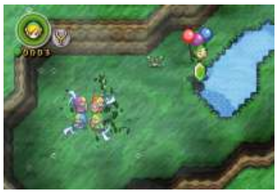
This game appeared on a whopping 70% of the top ten lists we received – 15% ahead of *Resident Evil 4*!

Everything from Link's facial expressions to explosions is delivered with artistic flair, and the minimal texture usage has allowed the game to age gracefully, with it looking especially fine in its HD remaster on the Wii U.

Besides, beneath the new look this was the same 3D *Zelda* that players had grown to love. Removed from the time looping of *Majora's Mask*, *The Wind Waker* is a more traditional 3D *Zelda* in which the DNA of *Ocarina Of Time* is evident in everything, from Link's controls to dungeon design. The major new gameplay addition of sailing around the world and getting into naval battles is very exciting initially, and while there is maybe a tad too much boating, that's soon forgotten during a tricky puzzle, or forgiven as the music reacts to your sword strikes. Getting a faithful successor to one of the best games ever made is certainly no bad thing, and that's essentially what *The Wind Waker* is, ensuring a fantastic experience from start to finish.

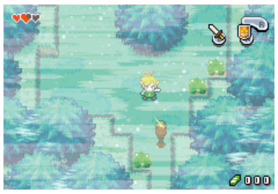
TOON LINK'S LEGACY

THE CEL-SHADED STYLE OF LINK'S ADVENTURE WAS NO ONE-OFF TRICK, AS THESE GAMES SHOW



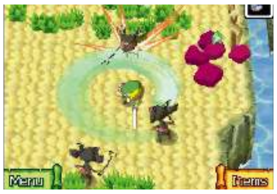
THE LEGEND OF ZELDA: FOUR SWORDS ADVENTURES

■ This one plays a little bit like *A Link To The Past*, but with the more modern Link joining forces with himself, himself and himself in a rare multiplayer outing. This was intended to be a showcase for the GameCube to Game Boy Advance link cable.



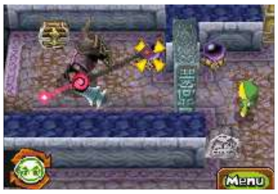
THE LEGEND OF ZELDA: THE MINISH CAP

■ Link finds a hat that allows him to shrink to tiny size here, in a game set between between *Skyward Sword* and *Four Swords*. Despite that, the visual style is clearly based on *The Wind Waker*, starting a legacy of handheld games that adopted the cartoon look.



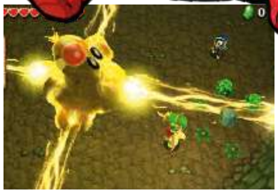
THE LEGEND OF ZELDA: THE PHANTOM HOURGLASS

■ This is a direct sequel to *The Wind Waker*, as you could probably guess by looking at the box art featuring Link sailing across the ocean once more. This DS game does its best impression of the cel-shaded look with the system's more limited 3D technology.



THE LEGEND OF ZELDA: SPIRIT TRACKS

■ This game still takes place in *The Wind Waker* timeline but a century after those events, and has Link travelling around New Hyrule by train. Since it's another DS game, the cartoon style is represented in a rather similar manner to that of *The Phantom Hourglass*.



THE LEGEND OF ZELDA: TRI FORCE HEROES

■ The most recent game to use our animated adventurer is this 3DS outing, another entry in the multiplayer line of *Zelda* games. Unusually, each Link has a hair colour that matches his clothing, meaning that the standard blonde look isn't to be seen here.

×22
360

W 1-3
× 5
SCORE
0000392

» RETROREVIVAL

New Super Mario Bros

MARIO GOES MEGA

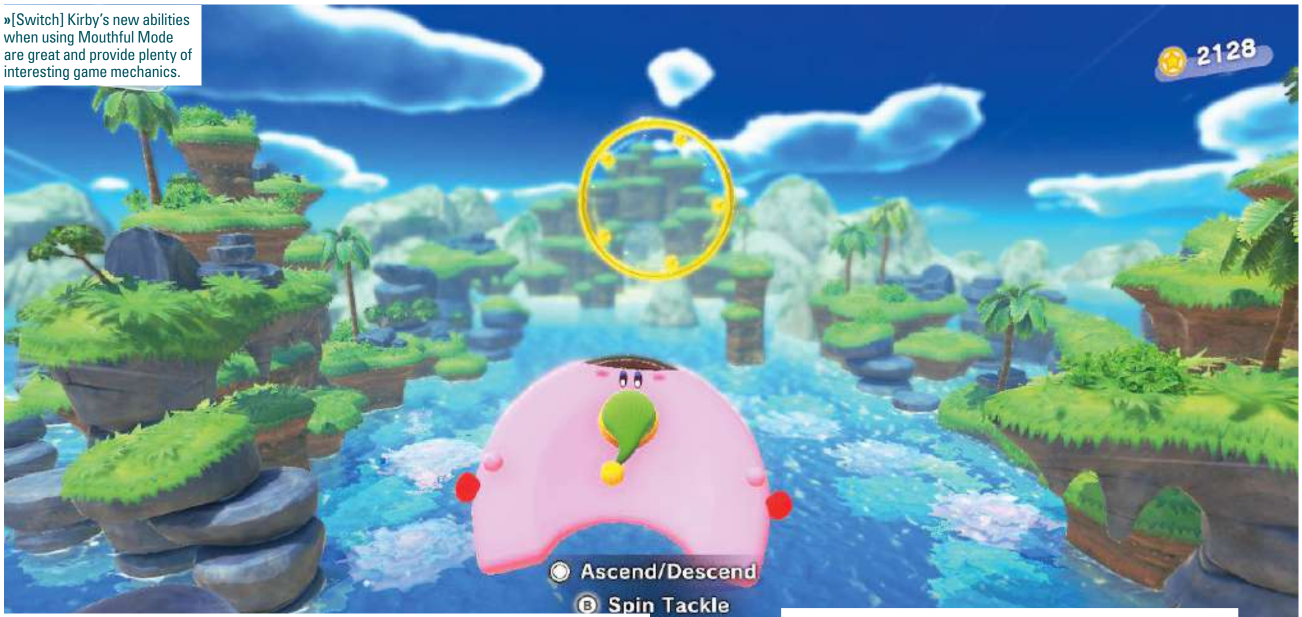
» DS » 2006 » NINTENDO EAD

It's weird covering games that you once reviewed in earlier issues of Retro Gamer (issue 27 if you're interested) but that's the passage of time for you. The annoying thing about revisiting *New Super Mario Bros* today is that while I've certainly been ravaged by said passage of time, Nintendo's game still feels as fresh and spritely as the day I first encountered it. Yes it's a pushover compared to earlier games in the series and yes it doesn't really push the *Mario* template in daring directions like the 3D games always manage, but it remains the best platformer on Nintendo's DS and I doubt I'll ever cut it from my collection.

When I awarded Nintendo's game 86% all those years ago my biggest gripe was the brevity of Mario's new adventure. That criticism still stands of course, but I do wonder if maybe I should have awarded it a slightly higher score, because 16 years on since I first encountered it, *New Super Mario Bros* still has a timeless quality to it. Maybe that's due to the fact that only three additional games in the series have been made, or perhaps it's because it feels like a more traditional side-scrolling adventure from Mario's earlier days. Regardless, it's a lot of fun, and ultimately that's what really matters.

That fun of course is found in numerous aspects of *New Super Mario Bros*' game design, but it's most obvious when you're able to grab a Mega Mushroom. All of a sudden you've grown to gargantuan proportions and your mass is so big that you can smash through blocks and other obstacles with ease. It's tremendously liberating being able to gleefully squish the many enemies that were giving you so much trouble as normal-sized Mario and Nintendo's decision to use it sparingly means it's always a delight whenever it appears. And ultimately that's what I think *New Super Mario Bros* is today, a delightful experience that remains the best entry in the *New Super Mario Bros* series. *

>> This month we complete Kirby's new adventure, find out how the latest game in The House Of The Dead series fares and watch Sonic The Hedgehog's fun movie sequel



»[Switch] Kirby's new abilities when using Mouthful Mode are great and provide plenty of interesting game mechanics.

Kirby And The Forgotten Land

YOU WON'T EASILY FORGET THIS

INFORMATION

- » **FORMAT REVIEWED**
  SWITCH
- » **ALSO ON:**
  NA
- » **RELEASED:**
  OUT NOW
- » **PRICE:**
  £49.99
- » **PUBLISHER:**
  NINTENDO
- » **DEVELOPER:**
  HAL LABORATORY
- » **PLAYERS:**
  1-2

It may have taken 30 long years, but Masahiro Sakurai's lovable pink blob Kirby has finally appeared in a proper 3D adventure game – and it's absolutely tremendous fun.

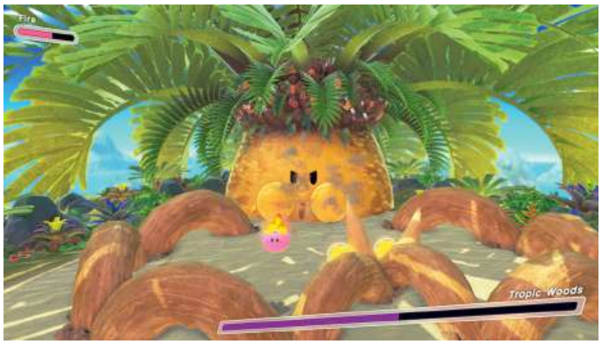
The plot is as twee and as shallow as you'd expect for a *Kirby* game, centring around Kirby being transported to New World, a strange post-apocalyptic planet where he quickly discovers that Waddle Dees are being kidnapped by the dangerous animals that live there. He soon meets a cute critter called Elfilin and they decide to pair up in order to rescue the missing Waddle Dees and hopefully find out who is behind the kidnappings.

While *Forgotten Land*'s story may be slight, the adventure is anything but and sees Kirby traversing six huge worlds, which include gorgeous grasslands, a colourful funfair (that looks absolutely eye-popping on an OLED Switch) and lava-strewn wastelands. While the locations of New World will be utterly familiar the way in which Kirby navigates them is not, and it's here where Hal Laboratory's imagination runs riot.

When Kirby got transported to New World, he gained the ability to swallow a number of different items that greatly affect how he navigates a stage. In Mouthful Mode swallowing a lightbulb allows him to illuminate unseen areas and power batteries, while gulping down a car lets him smash through barriers and take part in entertaining races. Many of Kirby's new forms won't only splay a smile over your face due to how gloriously silly they often look, but you'll also be impressed with the creativity on display as you methodically use them to navigate New World's clever environmental puzzles.

Forgotten Land has numerous nods to *Super Mario Odyssey* both in its beautiful aesthetic style and its inventive play mechanics and one of the most telling is that Hal Laboratory

»[Switch] There's a selection of new and old bosses and all of them have interesting attack patterns to master.



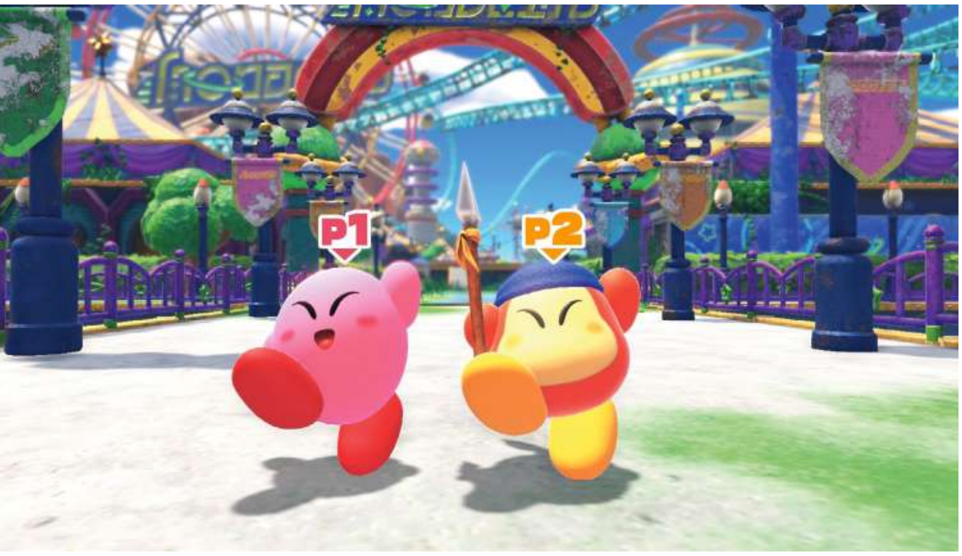
BRIEF HISTORY

» Kirby made his debut on Nintendo's Game Boy in 1992. A sequel arrived on the NES the following year and introduced one of Kirby's most popular skills – the ability to inhale enemies and copy their abilities. This has been played around with many times since to help keep the series fresh. Another aspect of this freshness comes from the many spin-off games starring Kirby that range from pinball (*Kirby's Pinball Land*) to releases with stylus-driven mechanics (*Kirby: Power Paintbrush*).

✱ PICKS OF THE MONTH

DARRAN
Kirby And The Forgotten Land
Stuffed with clever ideas and excellent visuals, this is the perfect way to celebrate Kirby's 30th year.

NICK
The House Of The Dead: Remake
It's been nice to revisit the battle at the Curien Mansion, since the sequels usually get more love.



» [Switch] If you're finding Kirby's adventure too much on your own you can always get a friend to help you.

Car-Mouth Cake
Recover some of your health.
20

★ REBUILDING WADDLE TOWN

» Rescuing Waddle Dees doesn't just make you feel good, they also help you significantly in your quest. When you first visit Waddle Dee Town you'll find it to be barely functional with just a few buildings and amenities available to use. As you save captured Waddle Dees they'll rebuild the town adding new features that range from shops that sell Kirby food and items, to numerous minigames and even the ability to listen to your favourite music. Progress far enough and you'll unlock an excellent battle arena that not only features bosses you've already defeated, but also a long-time Kirby nemesis. Basically, keep rescuing those cute Waddle Dees, you'll be surprised at what they can build you.

never leans too heavily on Kirby's new skills, so they always feel really special whenever they turn up. Of course, Kirby is still Kirby and he retains the ability to suck up enemies and copy their skills, but even this has been enhanced. In addition to two new copy abilities, Drill and Ranger, Kirby can find numerous blueprints that will let him power-up his base copy abilities in new and powerful ways. Additionally all these skills can be further increased whenever he visits Waddle Dee's Weapon Shop in Waddle Dee Town (see boxout).

This wouldn't be a *Kirby* game without some entertaining minigames to enjoy, and *Forgotten Land* has some decent ones that include a fun fishing game and a truly frantic affair where you serve customers at the town's diner. The most significant though are the Treasure Hunts that are scattered throughout the world map of New World. Each is based around one of Kirby's skills and they get progressively tougher as his quest continues. You'll want to master them though as they'll reward you with the items needed to upgrade Kirby's base copy abilities.

And you'll certainly need to ensure that Kirby is as strong as he can be because this is a surprisingly tough adventure for Nintendo's popular hero. Sure things start off relatively simple and you'll breeze through the first few worlds, but things soon take a turn for the worse and you'll need to be on top form in the later worlds, particularly if you want to rescue every Waddle Dee that has been captured.

The kidnapped Waddle Dees serve a dual purpose as they're not only required to rebuild Waddle Town, but also encourage you to experiment with your newfound abilities whenever you explore the game's huge levels. Before you start a stage you'll be presented with a number of missions. Some are displayed and will show you the rewards for completing a stage or let you know how many hidden Waddle Dees can be found, but most are hidden and are only revealed once you start triggering them during play. They can range from removing wanted posters to finding hidden passageways or eating certain types of food but they're smartly designed to encourage you to explore every nook and cranny of New World's stunning environments.

Forgotten Land features the same joy of exploration that made *Super Mario Odyssey* so much fun to navigate and the fact you'll rarely find everything on your first visit means that stages hold plenty of replay value once you do complete them. And even once the credits roll in *Forgotten Land* Kirby's adventure is far from over as new challenges are quickly revealed, meaning you'll certainly be glad of all those extra upgrades you picked up.

It's also worth mentioning Kirby's bosses as they're another highlight of the game and the series in general. While it's somewhat disappointing that Kirby doesn't get to use any his Mouthful Mode abilities in these skirmishes, they still make for some entertaining fights thanks to the smart attack patterns of each boss and their shocked expressions as Kirby smacks, pounds and shoots them into oblivion.

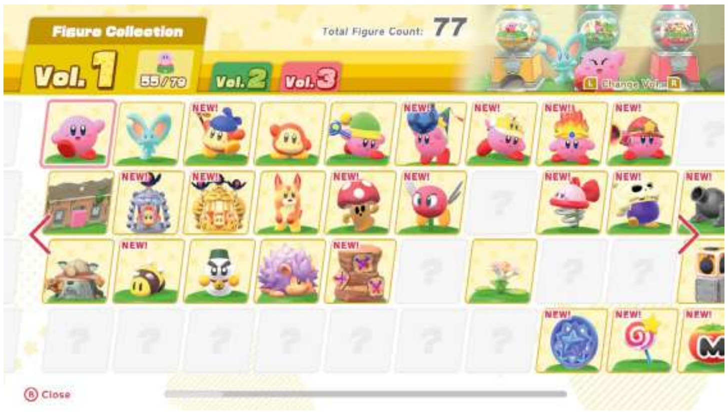
While *Forgotten Land* doesn't feel quite as polished as we would like, and suffers from a few weird difficulty balances in its later stages, it's arguably the best Kirby adventure yet and alongside *Kirby's Epic Yarn*, is easily the most inventive. Here's hoping Mouthful Mode returns in later games as it has reinvigorated a 30-year-old series in ways we couldn't imagine. ★

» [Switch] You'll need quick reactions if you want to serve all the Waddle Dees in this fun minigame.

In a nutshell

He might be 30 years old, but Kirby's latest game is an imaginative, well-constructed adventure that proves there's plenty of life in Nintendo's cutest mascot.

» Score **88%**



»[Switch] There's a collection of models that can either be found during play or purchased from dispensers in Waddle Dee Town.

RETRO ROUNDUP

WE LOOK AT THE LATEST RETRO-RELATED RELEASES

✱ PICK OF THE MONTH

The House Of The Dead: Remake

» System: Switch (tested), PS4, Xbox One, PC **» Buy it from:** Online, retail **» Buy it for:** £24.99

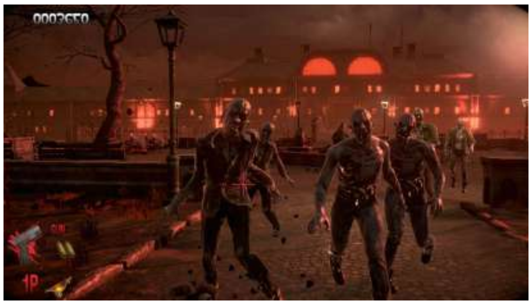
Right from the start, there's one major problem with *The House Of The Dead: Remake* – it's a lightgun game that doesn't feature any way to use an actual lightgun. If you can get over that, this is broadly a decent remake. Underneath the new presentation, this is very close to the original arcade game – stage layouts, enemy placements and boss behaviour are all faithful, with the only slight change being to make some of the jumpier enemies a bit less mobile to compensate for the controls.

While the visual update is pretty nice in general, there's a certain plastic sheen to some models that can look a bit cheap. The framerate can be a bit choppy and while it usually isn't a hindrance in the regular game, the number of enemies in Horde mode can make the engine chug. The music is only OK – we're not sure why soundalike versions have been used instead of the original music or new remixes.

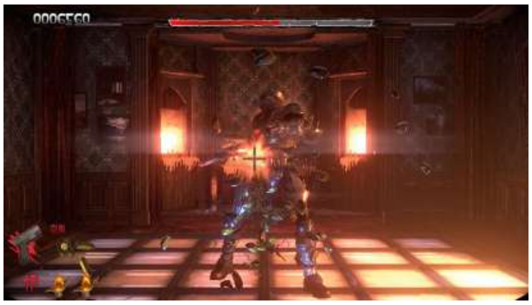
The game does offer a good number of additional features. The Horde mode chucks lots of enemies your way, which is an interesting challenge but sometimes feels a little unfair, with enemies managing to attack you while the camera is looking in a different direction. There are also various new weapons to try out, though you must save every scientist to unlock them.

Unfortunately, no matter how good everything else about the game is, there's a cap to how much fun it can be without the ideal control scheme. You can use a pad or try gyro controls, and while the latter is closer to the original arcade experience, you'll have to re-centre your crosshair as the aim drifts. Either way, there seems to be a bit of lenience regarding accuracy. The PS4 version, which was unavailable at press time, supports the Move controller and may be worth waiting for if you're looking for authenticity.

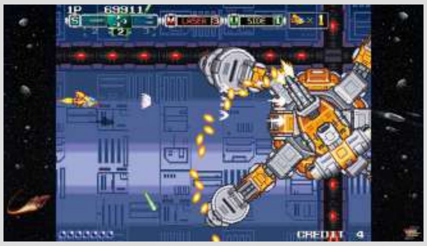
>> Score **71%**



»[Switch] This is one of the earliest swarms you'll face in the ferocious Horde mode.



»[Switch] Heavier graphical effects, like the lighting and lens flare here, are dropped in Performance mode.



Andro Dunos II

» System: Switch (tested) 3DS, PS4, PS5, PC
» Buy it for: £13.99+ (digital), £24.99+ (physical)
» Buy it from: Retail, online

***Andro Dunos* was a solid, if rather unspectacular shmup from the early Nineties, so this sequel has taken us massively by surprise.** Aided by a fantastic soundtrack from Allister Brimble, PixelHeart's shooter is an absurdly good sequel. Like the original there are four weapons to switch between, which can be powered up multiple times. New mechanics have been introduced, while the gargantuan bosses will push your trigger skills to the limits. There's a real flexibility to the combat mechanics, allowing you to change weapons to suit each new area. A lack of customisable controls and no two-player option do hurt it a little, but this remains an excellent shmup with plenty of challenge.

DARRAN JONES

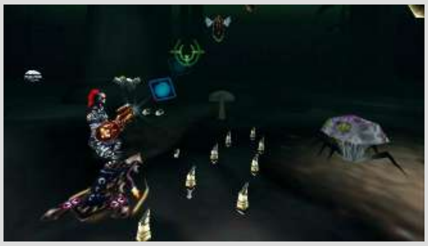
>> Score **87%**

Sonic The Hedgehog 2

» Studio: Paramount
» Cast: Ben Schwartz, Jim Carrey, Idris Elba

With Sonic's adoptive human family in Hawaii for a honeymoon, they're trusting Sonic (Schwartz) not to get into trouble. Unfortunately, Robotnik (Carrey) has escaped from the mushroom planet and he has the fearsome fighter Knuckles (Elba) in tow, and they're out to defeat Sonic and capture the powerful Master Emerald. Luckily for Sonic, he also has a new friend in the brainy Tails (Colleen O'Shaunessy), who aids him in thwarting the mad doctor's scheme. This time around, the film employs much more of the iconography of the games, while making good use of the human cast in their less-significant roles. Elba's portrayal of Knuckles is excellent – the proud and powerful echidna comes across as a credible threat to Sonic. This is an overall improvement on the original movie, and a fun outing for kids and adult fans alike.

NICK THORPE



Xenocider

» System: Dreamcast (tested), PC **» Buy it for:** £30
» Buy it from: Retail, wavegamestudios.com

***Xenocider* is a rail shooter which takes inspiration from games such as *Sin & Punishment* and *Space Harrier*.** Your goal is simple – run through each stage, jumping over obstacles and shooting everything you see, ideally before you get shot. While you have regenerating power-ups like a shield and a screen-clearing nuke, you can't withstand too many hits and death sends you back to the start of a stage. The visuals are some of the best we've seen in a Dreamcast indie game, though incoming fire can sometimes be obscured, and the electronic soundtrack fits well. There are plenty of achievements and unlockable modes to be found too, so the game will last you a good while if you're up to its considerable challenge.

NICK THORPE

>> Score **80%**

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sinclair PDA 2K
WOW Such Coin!
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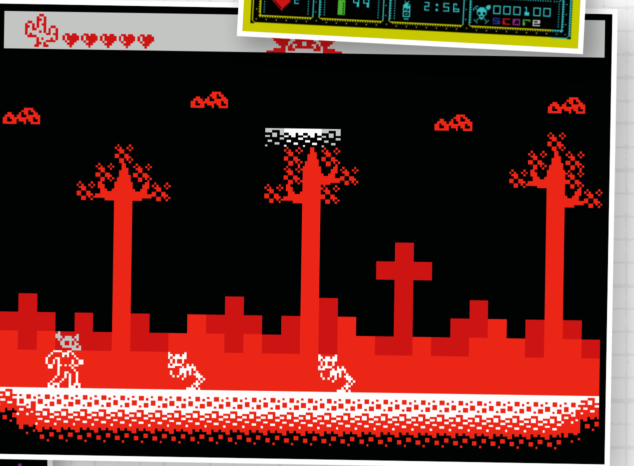
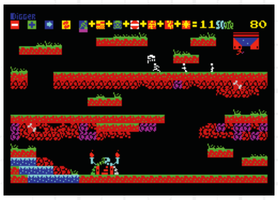


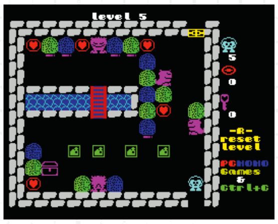
<!--- [ZX SPECTRUM] BASED ON AMAWEK'S OWN PC GAME, THE STRIKING VIRGIL'S PURGATORY SEES YOU THROWING YOUR SKULL AT ENEMIES. --->

<!--- ORGANISER IVAN SANCHEZ (LEFT), AND COMPETITORS ANTONIO PEREZ AND EDUARDO VILLALOBOS (TOP ROW), SERGEI YAKIMOVICH AND SERGEI SMIRNOV (BOTTOM ROW). --->

<INTRO> THIS MONTH WE'RE HIGHLIGHTING THE SKILL IN REMAKING A GAME FOR OLD HARDWARE. THE RECENT ZX-DEV COMPETITION INSPIRED CLEVER 'DEMAKES' OF MODERN TITLES, WHILE A HUGE PICO-8 FAN SERVES US UP A MIXTURE OF GAME JAM AND SPICY STRATEGY. NES OWNERS FINALLY GET A PLATFORM CLASSIC TO PLAY, AND THERE ARE TASTY TITBITS FOR ATARI FANS. </INTRO>

You run to your library & to check your engineering notes, your books on physics, multiverses, and the fourth dimension.





<MAIN HEADER>

SPECTRUM SKILLS

<INTRO> ORGANISER IVAN SANCHEZ AND LEADING COMPETITORS TALK ABOUT THE RECENT ZX-DEV 2021 CODING COMPETITION </INTRO>

<BODY> **"Every time I finish one, I end up feeling exhausted in terms of time invested," says Ivan Sanchez (IvanZX) as he completes his fourth ZX-Dev competition.** "I saw how the MSXdev was successful and brought a lot of action and competition, so I was wondering if I could do something similar for the Spectrum." With sponsorship from Sintech and donations towards the prize fund, Ivan tells us, "The more donors there are, the more attractive the competition gets. [Sponsors] play the games and compose the jury that will decide the winners."

This year's theme was Demakes and Media. "I normally choose themes that are somewhat flexible and can generate interesting games," Ivan says. "I also choose themes that are attractive to me, for example, conversions, as it is very interesting to see how coders can adapt games that were created on superior machines to the Spectrum."

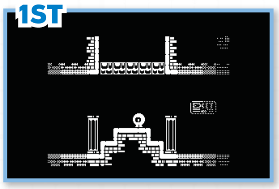
Pat Morita Team finished joint first with *Tokimal* (based on *Toki*) and third with *Shovel Adventure* (also winner of the CPC Dev Compo 2021). Coder Antonio Perez, having competed in the previous two competitions, tells us, "I love this kind of competition, and they motivate our team even more." There was time pressure, with *Tokimal*'s development taking 18 months in total. "*Shovel* was finished soon, so no problem with the deadline" continues Antonio, "but *Tokimal* was finished only a few days before. We finished on time, but the last two weeks were intense."

"For the sake of having enough time I took a vacation from work," says Sergei Smirnov, coder of joint winner *Nothing* which expanded on the original PC game. "Developing the game from scratch took exactly one year and thirteen days. When I decided to participate, I didn't know until the last week whether I would have time to do everything I wanted to."

Another impressive demake was *Hallowed Knight*, based on *Hollow Knight*. Creator Eduardo Villalobos (EJVG) says, "I had been programming for about eight months, and I still had time to correct bugs before the deadline. The

THE CHOSEN ONES

1ST

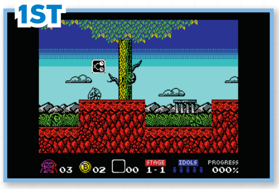


NOTHING

Sergei Smirnov

<"One of my acquaintances told me about *Nothing* on PC, which is made in an aesthetic style. I started to get ideas on how to expand and develop the story."/>

1ST



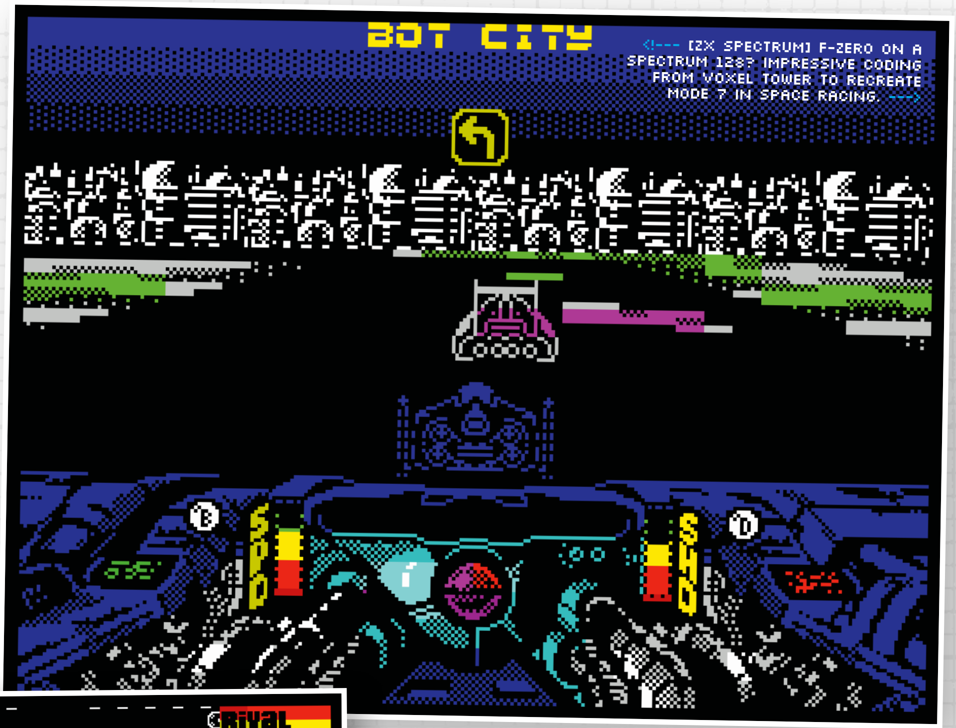
TOKIMAL

Antonio Perez, Pat Morita Team

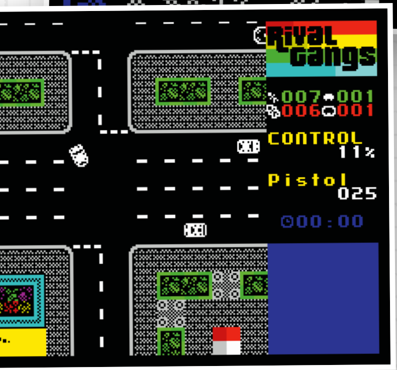
<"*Tokimal* was about 50% done and it was already a demake, so this was a nice opportunity to have a deadline and focus on it." We'd say the team's hard work certainly paid off./>

NEW GAMES NEEDED

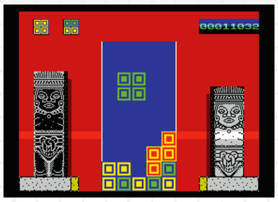
Our new email address is waiting for all your homebrew news, previews and more: **retrogamer@futurenet.com**



<!--- [ZX SPECTRUM] F-ZERO ON A SPECTRUM 128? IMPRESSIVE CODING FROM VOXEL TOWER TO RECREATE MODE 7 IN SPACE RACING. --->



<!--- [ZX SPECTRUM] RIVAL GANGS FROM ZXPRESH TRIED TO RECREATE THE ANARCHY OF THE ORIGINAL OVERHEAD GRAND THEFT AUTO. --->



worst and the best part I think are the same, the lack of RAM. Though it's painful to cut more and more until you can fit the game into memory, this is an advantage too, because it helps to delimit and define the game."

Mechwars: Centipede, with added campaign mode, fits into Sergei Yakimovich's current trilogy. "The game had to fit within the contest, be a stand-alone game and an organic part of the series," he says. "There were quite a few ideas rejected that could not be implemented. I learned long ago to plan resources to not get frustrated by the deadline. Sure, release deadlines pushed me to work on the game regularly, but no more than that." Sadly, some planned entries didn't finish in time. "Many of them were quite intriguing, like *Silent Hill The Tape* and *Shock Trooper* [based on a 1985 TRS-80 game and sci-fi show *V: The Final Battle*]," says Ivan.

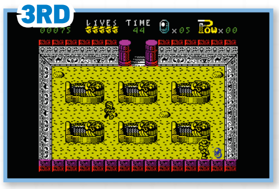
Other highlights included *Rival Gangs*, *Space Racing*, *The Humans*, visual novel *The Time Machine*, *The Last Escape*, *Black Sea Treasure Hunters* and Noentiendo's *Get Out Of Mars* (a reworking of the PICO-8 game *Get Out Of This Dungeon!*)

The **RG** forum thread at bit.ly/homebrew233 has links and the full interviews, so enjoy playing all the entries!

</BODY>

<INTRO> HOW THE TEAMS CHOSE THEIR ENTRIES </INTRO>

3RD

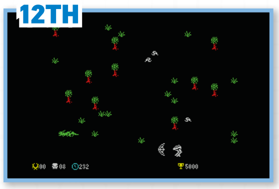


SHOVEL ADVENTURE

Antonio Perez, Pat Morita Team

< "*Shovel* was almost finished for CPC, and the Spectrum version was also in progress when the competition was announced. We thought we can easily make it fit into the rules." />

12TH

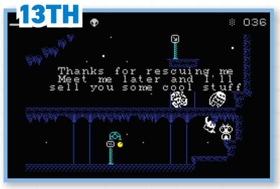


MECHWARS: CENTIPEDE

Sergei Yakimovich.

< "I figured out that I could add something new to *Centipede* – the iconic, classic game. It also stacked up well with the *Mechwars* trilogy I'm currently developing." />

13TH



HALLOWED KNIGHT

Eduardo Villalobos

< "*Hollow Knight* is a masterpiece that has lots of things that connect it to the Spectrum. I also wanted to approach Spectrum gamers with a more modern gameplay style." />

LEVEL 02
TOP
005000
SCORE
002175
LIVES
03
BOMBS
05

NEWS BYTES

<INTRO> NOW ORGANISED BY FORMAT, HERE ARE THE LATEST NEWS BYTES TO ENJOY </INTRO>

< **Atari ST:** Thomas Ilg of Filmproduktion released *Randominer*, inspired by *Minesweeper* with new graphic modes and gameplay additions. Visit it bit.ly/randominer to download, and check out prequel *Randomazer* at bit.ly/randomazer Côté Games has published *Toogle*, the *Polarium*-style puzzle game from Dune and Sector One. For boxed games and retro books, visit cotegamers.com/shop/en />

< **Atari 8-Bit:** Atarimania has preserved the previously unreleased *Tube Trooper* from 1984. Find out more at bit.ly/tubetroopera8 />

< **Amstrad CPC:** *Puzzle Bobble* was updated to v1.2, with extra animation and faster launching. Download versions for C4CPC and Dandanator at crazypiri.itch.io/puzzle-bobble />

< **C64:** May the 4th be with you, as Megastyle is releasing *The Empire Strikes Back* – a stylish remake of the classic Atari 2600 title. It's at megastyle.itch.io />

< **C64 & Amiga:** Retream has made its current games free, including C64 hacking game *MAH* and *ArtPazz* for Amiga. Amiga shoot-'em-up/puzzle hybrid *Skill Grid* has been updated to v1.1 Beta with enhancements and better CD32 compatibility. More at retream.itch.io />

< **Game Boy:** Dana of Greenboy Games is funding *The Shapeshifter 2 – Become The Animal You Touch*. Inspired by *Monkey Island* and old-school adventures, boxed editions and a third game will follow. More at bit.ly/iggg-shapeshifter2 />

< **PICO-8:** Pak9's *Pico World Race* has a twist – collect crystals as you race around eight international circuits. See it and play it at bit.ly/picoworldrace />

< **ZX Spectrum:** *Stars Gumi 2* is a cute puzzle platformer from kas9. It's free at bit.ly/starsgumi2 *Rubinho Cucaracha* is wacky racing action from Zoysa and is free at bit.ly/zosya-rc />

< **ZX Spectrum Next:** Rob Moran released *Dougie Do*, starring the brother of a famous cherry-collecting clown. This time it's ten levels filled with diamonds to beat, with bombs and falling rocks your main weapons. More at robgm.itch.io/dougie-do />

CHAMPION CODER

PAUL NICHOLAS

<INTRO> PAUL RAN THE 1K JAM FOR PICO-8 – ITCH.IO/JAM/PICO-1K – AND HAS REMADE A CLASSIC STRATEGY GAME </INTRO>

<INFO FROM: ENGLAND WEBSITE: LIQUIDREAM.CO.UK, ITCH.IO/JAM/PICO-1K FORMAT: PICO-8 RECENTLY CODED: SPEED POOL, LO MEM SKY, SCUMM-8 DEVELOPING: UNDUNE II – LIQUIDREAM.ITCH.IO/UNDUNE2/>

WHAT GOT YOU INTO DEVELOPING FOR PICO-8?

<An animated tweet by PICO-8 creator Joseph 'Zep' White, which showed how to create a *Snake*-like game in just 79 seconds. I was intrigued with the 'Fantasy Console' concept. What sealed the deal was discovering the way games could be shared through .PNG files! That was five years ago, I still enjoy creating with PICO-8 as much today as the day I purchased it. />

WHAT INSPIRED THE 1K JAM AND ITS RESTRICTIONS?

<The main inspiration came from #TweetTweetJam (created by Andrew Reist), which requires entries to fit into two Tweets (560 characters). I wondered whether a 1024 char/byte limit might be a 'sweet spot' to allow some decent games, demos & tools under similar restrictions (no pre-defined sprites/map/sounds, all created via code), potentially making it more accessible to a wider audience. />

WHICH ENTRIES IMPRESSED YOU?

<I don't like to pick out favourites, as the jam was deliberately run as a non-competitive one. I was very impressed with:

Squiddy – Lovely 1-bit graphics and illustrated manual (co-created by Zep!)

Tetris 1K – impressive graphics and gameplay

FreeCell 1K – a demake of the famous card game

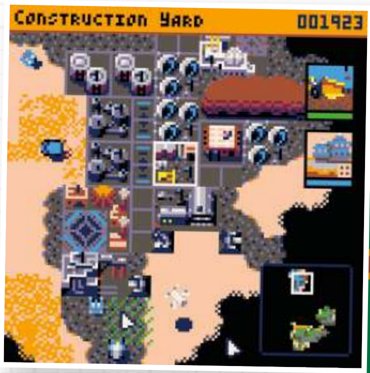
Maze 3D – It's a great fully-textured *Wolfenstein 3D*-type maze explorer />

WILL YOU BE RUNNING ANOTHER JAM?

<Yes, I'm hoping to make it annual. It was my first time running a jam, and while it required a fair amount of preparation time, the many cool entries we got and how much fun everyone was having made it all worth it. />

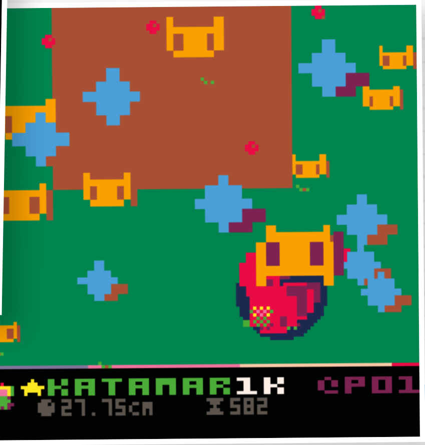
WHAT ARE YOU WORKING ON?

<I've released *UnDUNE II* – my PICO-8 demake of RTS classic *Dune II*. I've been working on it in my spare time for almost three years. It's easily the biggest PICO-8 project to date – *Low Mem Sky* and *SCUMM-8* only took a few months. I kept trying to squeeze in as many features from the original game as I could, finding ways to condense the code. It's all accompanied by great music and FX from my frequent collaborator, Chris 'Gruber' Donnelly. It's been very well-received so far, with people clocking-up multiple hours' worth of gameplay – pretty cool for a PICO-8 game. All of this has been lovely to see. />



<!--- [PICO-8] VERSION 1.4 OF UNDUNE II IS OUT NOW, WITH ADDITIONAL FEATURES AND FIXES. --->

<!--- [PICO-8] KATAMARI1K CLEVERLY SCALES OBJECTS AS YOUR BALL GETS BIGGER. --->



DATA BURST

MONTEZUMA'S REVENGE

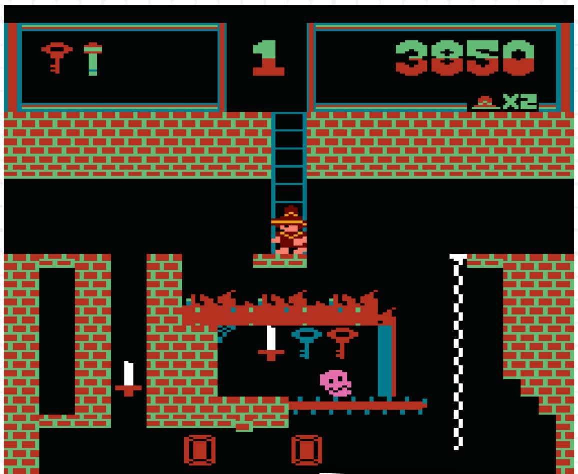
<INFO BY: NORMAL DISTRIBUTION LLC (ROBERT JAEGER) FORMAT: NES PRICE: TBC VISIT: BIT.LY/MONTEZUMA-NES />

<BODY> **The NES never got this classic Eighties platformer, something original programmer Rob Jaeger wanted to put right.** The Kickstarter is funding physical versions for backers, including a 'Pedro' USB stick (named after the original version of the character, including lots of extras and photos) and NES carts.

Panama Joe is aiming to get rich by gathering jewels from the pyramid of Montezuma II. Unfortunately, there are many hazards, including fire pits, snakes and skulls. Coloured keys open corresponding doors, the sword allows you to kill the next enemy you touch, and the torch is needed to light dark rooms at the base of the pyramid. Nine floors made up of ninety-nine increasingly difficult rooms make up each pyramid level, with the aim being to loot the Treasure Chamber found at the end of each pyramid.

The chunky graphic style and familiar first few rooms will ease veterans in, but newcomers may find the pixel-perfect jumping taxing. The music is faithful to the original, with sections of *Spanish Flea* and *La Cucaracha*. Endearing little touches include Joe's legs flailing when he falls too far, and the snakes turning to watch him go past. The gameplay is perfectly recreated, but for those wanting something different the digital download will include the recent Windows 10 reboot with optional scrolling levels (also available on Steam). It's perfectly suited to the NES and a great tribute to a retro gaming legend – especially if you remember it first time around. </BODY>

SCORE: 85%

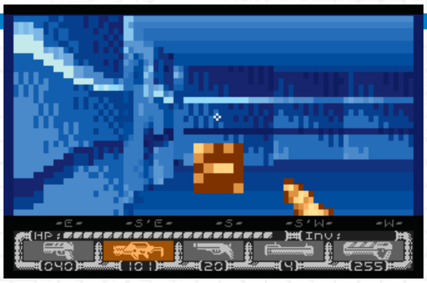


<!--- [NES] IT HAD TO BE SNAKES. AND SKULLS. AND LOCKED DOORS.

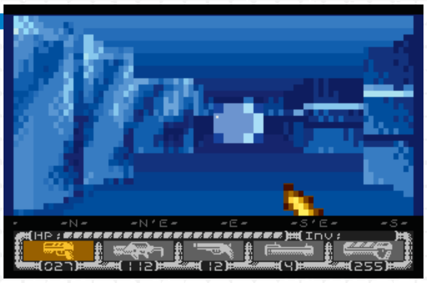
<!--- [NES] PANAMA JOE HAS FALLEN, AND HE CAN'T GET UP.

NEW GAMES NEEDED

Our new email address is waiting for all your homebrew news, previews and more: **retrogamer@futurenet.com**

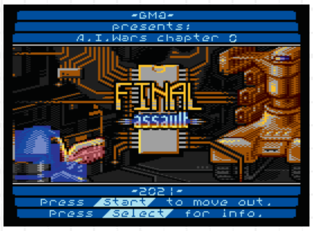


<!--- [ATARI 8-BIT] RAIDING ALL THE CRATES IN FINAL ASSAULT EARNS YOU THE VAGRANT TITLE. --->



<!--- [ATARI 8-BIT] THE PATROLLING ORBS CAN BE TRACKED USING THE SOUND EFFECTS, AS CAN MINES WITH THE DETECTOR (UNLESS DISABLED). --->

FINAL ASSAULT

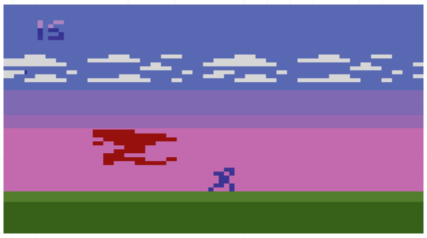


<INFO BY: GMD (ROBERT 'GLOBE' PECNIK, MAREK 'MARCO' CHORVAT, MARIAN 'GOLDMASTER' VYBOSTOK)
FORMAT:ATARI 8-BIT (64K, PAL & NTSC)
PRICE: FREE DOWNLOAD VISIT: ATARI8.DEV/FINAL _ ASSAULT />

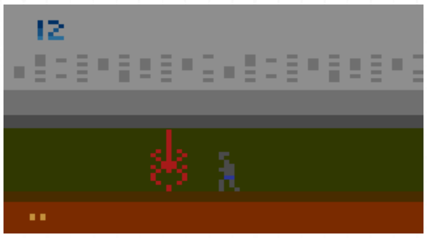
<BODY> **It's 2099 and a rogue AI is waging war against the remaining humans on Earth in this impressive FPS for the hardware.** You know the drill – grab weapons, take down enemies and use the helpful AutoMap to navigate around 17 levels. In a neat touch, breakable walls can be shot open with the rocket launcher. The ray casting and 3D movement is smooth with animated wall textures. There's some impressive presentation including the introductory text which adds to the mood and there are numerous in-game 'titles' to be claimed. It's just a shame there are only limited enemy types that move in predictable ways. The large boss is a treat to come up against, however. It's all slickly programmed with outstanding music, but sadly does not last long.

Final Assault supports the SNACK adapter for Super NES joypads and includes schematics for hacking a USB joypad creating a dedicated controller. </BODY>

SCORE: **80%**

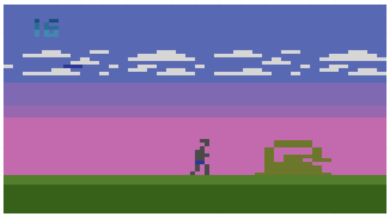


<!--- [ATARI 2600] THIS LARGE DRAGON IS ONE OF 14 ENEMY TYPES IN SOUL OF THE BEAST. --->



<!--- [ATARI 2600] A DARK DUNGEON MIGHT HIDE A HEALTH POTION OR USEFUL KEY. --->

SOUL OF THE BEAST



<INFO BY: AERIFORM (DEVELOPED BY MICHAEL CHRISTOPHERSSON) FORMAT: ATARI 2600 (NTSC ONLY)
PRICE: DIGITAL DOWNLOAD $5.00 OR MORE, BOXED CARTRIDGE PRE-ORDER $45.00
WEBSITE: AERIFORM.ITCH.IO/BEAST, BIT.LY/SOUL2600 />

<BODY> **The demon messenger broke free of his evil masters and must now rid the land of the sorcerer Rynkar.** Evoking the essence of 16-bit showcase *Shadow Of The Beast*, your character runs along, fights or dodges enemies and picks up artefacts to help and heal. There are also wells and doorways leading to other areas to explore. Graphically it works well with clever layered scrolling and large sprites, but sound is simplistic and with limited controls the gameplay lacks depth – much like the original *SOTB*. A digital download is the best way to sample this, with the boxed cart (NTSC compatible only) perhaps best for the hardcore collector. </BODY>

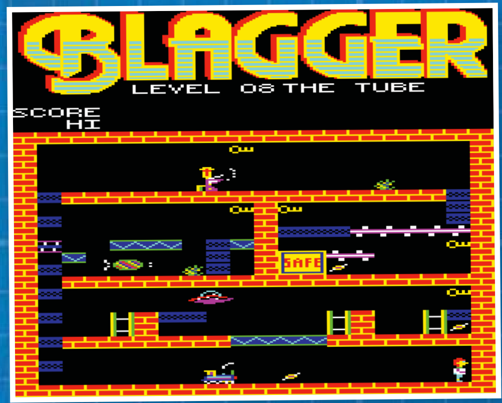
SCORE: **65%**

PROCESSING

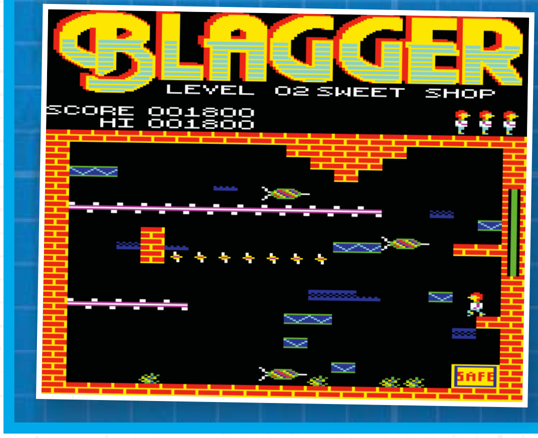
<INTRO> TWO VERY DIFFERENT TITLES IN THE WORKS THIS TIME, STEALING ONTO THE ELECTRON AND GAME BOY </INTRO>

<BODY> **Snuggsy187 reveals his latest Acorn Electron project.** "Over the Christmas/New Year holidays I investigated an old disassembly of *Blagger* by RS Goodley, to see what made it tick, and [if there was] any way to speed up gameplay. Other performance gains in Mode 2 were found by rewriting the procedure that prints the rooms, printing all moving sprites at VSync (vertical sync) to reduce flicker, rewriting collision detection and streamlining. No changes to gameplay were made, except for sound effects – and how you could jump/stand on the edge of a poisonous plant! I just need to tidy some things up." You can follow @Snuggsy187 on Twitter for more updates, including his forthcoming Electron *Dare Devil Dennis* and *Zaxxon* projects.

Mexican designer César Arminio (2think Studios) is funding his new Game Boy title *Glory Hunters*, with the physical cartridges (playable on all forms of Game Boy and Analogue Pocket) to be published by Bitmap Soft in 2023. Explore a massive world, take on monsters and earn Glory Points to upgrade your hero. The collector's edition will be limited to 200 copies, with an art book and soundtrack CD. Try the demo at bit.ly/glory-demo and back the game at bit.ly/glory-ks by 25 May. </BODY>



<!--- [ACORN ELECTRON] – BLAGGER IS SLANG FOR THIEF. TRY TO OPEN THE SAFE ON EACH LEVEL BY PICKING UP ALL THE KEYS. --->



HOT TOPIC

RETROBATES MULL OVER THE SCENE'S MOST INTRIGUING ISSUES

4th
120 KPH
uk race 2

» [PC] If you want to pull off crazy *Trickstyle* moves like Nick, you'll be pleased to learn it was re-released on PC in 2017.

THE NEED FOR SPEED

The team discusses futuristic racers

DARRAN JONES

NICK THORPE

TIM EMPEY

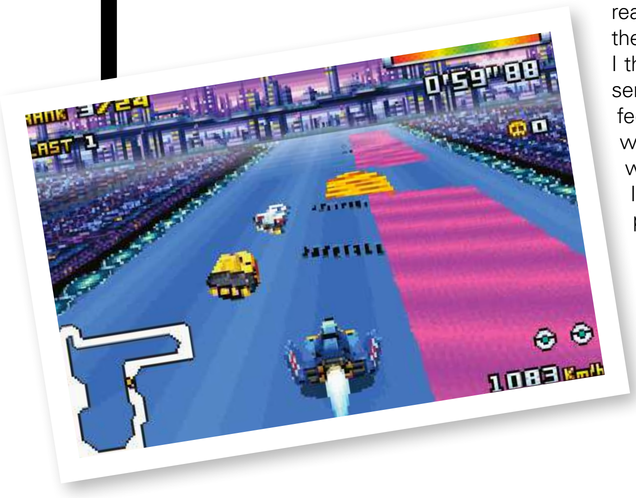
While numerous racing games are great for giving a rush of adrenaline, the sub-genre of futuristic racers takes the concept to obscene new levels. Nick, Darran and Tim, strap in and talk *Rollcage*, *F-Zero* and why we'll probably never get a new *WipEout* on home consoles.

DARRAN
What does everyone look for in a futuristic racer (besides the obvious of course).

NICK
Typically, I'm after extreme levels of speed that exceed what you'd find in a conventional racing game, and some combat element. *Death Race 2000* and *Rollerball* taught me that every futuristic sport should be violent.

TIM
Yep, it's got to have some sort of destruction going on – the *WipEout* series had some brilliant weapons in it, especially the Quake Disruptor.

DARRAN
My earliest introduction to futuristic racers was probably *F-Zero* and there weren't any weapons in that. To me it's really all about gut-wrenching speeds. I'd say bizarre characters as well, but outside of *F-Zero* and *Episode 1: Racer*, I can't really think of any good examples. Why do we think *WipEout* made such a big deal?



» [GBA] *F-Zero Climax* was released in 2004. That's a long time with no new *F-Zero* game to play.

» [Xbox 360] Nick once had a fevered dream where he imagined Darran playing *Sonic Free Riders* while wearing a Sonic hat and blue face paint.

> "Sometimes people just want the games they love with new levels and shinier graphics. I want F-Zero with new tracks and shinier graphics"
>
> NICK THORPE

NICK
What's interesting is that *WipEout* had characters in the first game, each team had two pilots to choose from. It didn't really matter much though, and they dropped that in the sequels. I think a lot of the appeal of the series came from the look and feel of it – knowing The Prodigy were on the *2097* soundtrack was a big draw for me, and I drew the team logos on a pencil box I made at school.

DARRAN
I did not know that about *WipEout*. Did you know that, Tim?

TIM
Nope, I didn't play much of the first *WipEout* because by the time I got a PlayStation *2097* was out and it looked and played so much better. The music definitely helped elevate it. I wasn't even into dance music back then, but I have *We Have Explosive* by The Future Sound Of London on my iTunes these days because of *2097*.

DARRAN
I'm not really one for dance music so I kind of bounced off the first game, although I did get to play *2097* and later releases. I'm sure I would have had *WipEout 64* at some point as well. Speaking of the N64, I much preferred *Episode 1: Racer* and *Extreme-G*. They were both really slick racers.

TIM
Anyone remember *Rollcage*?

NICK
Rollcage was good fun! I always liked being able to drive on the ceiling. I also like the modern spiritual successor *Grip*, and the kid-friendly PAL PlayStation exclusive *Firebugs* which is by the same team.

DARRAN
I've not played any of those games, but I recall you interviewing the developers for *Grip*, Nick. Tim's already mentioned *WipEout*'s Quake Disruptor, but what other weapons impressed you?

NICK
It's not so much a weapon, but I always liked the trick you used

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RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com

to attack in *Trickstyle*, the Boogie Drill. Your boarder lies face-down on their board and spins like a corkscrew, and you'd smash through windows and knock other riders off their boards.

TIM
Just going back to the Quake Disruptor in *2097* – it was really destructive, knocking ships out of the way, and it looked so cool.

DARRAN
It certainly leaves an impression, that's for sure. I just remembered two things: one, I forgot to mention *STUN Runner*, as one of the first futuristic racers I've played, and two, Nick's just reminded me that *Sonic Riders* exists and we've not teased him about it yet.

NICK
Ah yes, *Sonic Riders*. Didn't you play *Sonic Free Riders* on Kinect, while wearing a Sonic hat and blue face paint, and then upload the footage of this to YouTube? The evidence seems to have disappeared, but I'm sure this is a thing that happened.

DARRAN
Well that doesn't sound like something I would ever do, particularly if it was in order to win a game, so my only assumption is that you absolutely must have imagined it.

TIM
Why hasn't there been an *F-Zero* game in ages?

NICK
In past interviews, Miyamoto has asked why players would want a new *F-Zero* – he doesn't know what they'd want that hasn't been done before. It's a reasonable question, but sometimes people just want the games they love with new levels and shinier graphics. I want *F-Zero* with new tracks and shinier graphics.

DARRAN
I'm pleased to see that *F-Zero X* is now available on Switch but I'd love to see a new game in the series as past GBA games were pretty decent.

NICK
Apparently *F-Zero GX* did about 1.5 million copies, which is good but not loads. Then again, it was a GameCube game.

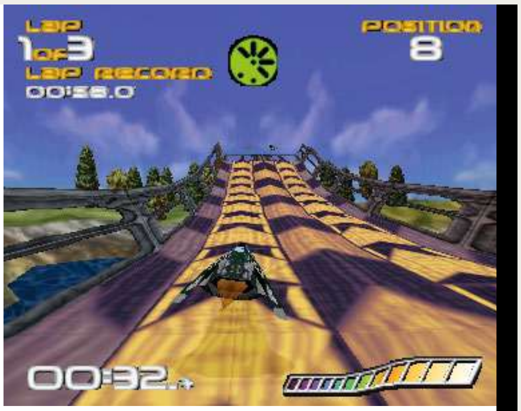
DARRAN
That's pretty impressive. Isn't *F-Zero* one of those franchises like *Metroid* which simply isn't that popular in Japan, or have I just made that up?

NICK
Looks like it, it's much more popular elsewhere based on some sales figures I've seen.

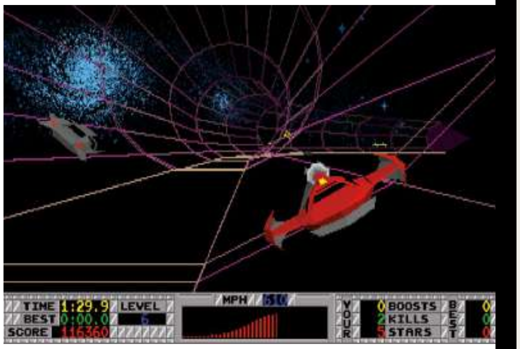
DARRAN
I feel like *WipEout* is in a similar situation but again, I've probably just imagined it.

NICK
I feel like that might even be a case of it being more popular in Europe than anywhere else, I'm not sure it's a super big deal in America either.

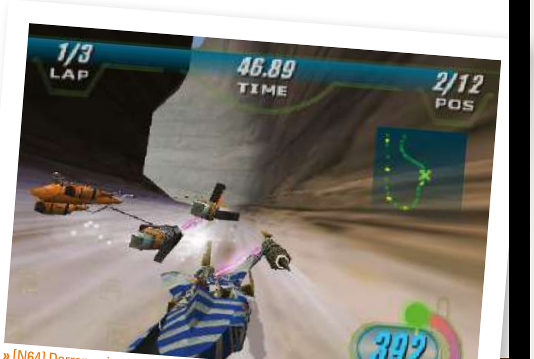
TIM
A new *WipEout* would be awful, music-wise anyway – have you heard what kids actually listen to these days? Sodding autotune. Now, if you'll excuse me, I have a cloud to go yell at. *



» [PlayStation] One cool aspect of the original *WipEout* is its elevated tracks.



» [Arcade] Some of *STUN Runner*'s levels looked amazingly futuristic in 1989.



» [N64] Darran enjoyed the alien aspect of *Star Wars Episode 1: Racer*, as it added some additional personality.

» [PC] Oooh, what a feeling, when you're (not pictured) racing on the ceiling in *Grip*.

SPEED FREAKS

Readers share their favourite futuristic racers

Elden Lord Francis
F-Zero because each vehicle is associated with a well-built character.

Dawid Venter
I can't decide between *WipEout HD/Fury* and *F-Zero GX*. Two very different futuristic racers. One is all about combat, and the other is about pure speed. I love both.

TILLY
WipEout 2097 blew me away when I first played it on PS1. A clever move by Psygnosis to include cool licensed tunes.

Neil McEwan
STUN Runner by Atari on arcade hardware, although the Lynx version was cool, too! [Agreed, it's an excellent conversion – Ed]

RabidWookie
San Francisco Rush 2049. Still the best arcade racer of all time. And the best stunt game. And the best vehicle combat game.

Mark Elliott
POD. I loved the style, the range of tracks and vehicles it came with and the ability to race up to five ghost cars. Plus it was a great reason to get a 3DFX card.

We LOVE the ARCADE
MegaRace, because the gameplay was great, but the cutscenes between gameplay were hilarious… at least as a teenager I thought so.

ElderlyGoose
Extreme-G. It was the most affordable racer on the N64 back when I was trading games for games, and a surprisingly fast and smooth racer.

Ash H
A new level of cool that was *WipEout 2097*.

Michael
I think most people will say *WipEout*, but mine would have to be *Rollcage* back on the PlayStation.

Tim Lince
I've always seen *Micro Machines* as a game set in a future where humans can shrink down and race around household and garden furniture.

Chris Miles
WipEout 2097, such an incredible sense of speed set to a brilliant soundtrack

Mastered Realm
MegaRace! The soundtrack and graphics were truly ahead of their time and the gameplay is easy and fun.

EpicMiBz
Definitely *WipEout*. I absolutely love the futuristic setting and style of the vehicles.

VROOM + DATA DISK

"The separate expansion versions make *Vroom* extremely rare. Made by French developer Lankhor in the early Nineties. The game was bought up by Domark and became the official F1 licensed game for 1993 and beyond."

PAID: £200+

SEGA RACERS

"My SG-1000, SC-3000 and Mark III titles are some of the oldest in the collection."

PAID: £60 EACH

BIO

NAME:
Jon Gage

LOCATION:
Norwich, UK

FAVOURITE GAME:
Super Monaco GP

FAVOURITE SYSTEM:
PlayStation

COLLECTION WORTH:
Estimated at £7,000

TWITTER:
@oll_gaming

FORMULA 1

"Good old PS1 *F1* with Murray Walker!"

PAID: £40 (1996)

OFF TO THE RACES

Jon Gage's collection will have motorheads drooling

While we've often featured collectors who collect games based around specific genres or franchises, we've never had a collector like Jon Gage before.

Jon actually has two collections. One has morphed into the Norwich gaming cafe One Life Left the other is focussed around Formula 1 games and it was fuelled by two things. "As a ten-year-old in 1991, my first console was a Sega Master System 2, and with it came my first ever game: *Super Monaco GP*," Jon tells us. "*Monaco* was the one game that made me fall in love with games and indeed, driving games in particular." That passion for racing was fanned further due to Jon's father, who introduced him to real-life Formula 1. "I have fond memories to this day of sitting with my dad cheering on Nigel Mansell against the great Ayrton Senna as Murray Walker exclaimed manically as each lap went by."

Although Jon initially focused on collecting only officially licensed F1 games, he soon expanded it to European variants and worldwide releases, before going down the rabbit hole. "I'm at the point where I'm getting all sorts of silly things, such as the four-disc *Kelloggs Frosties GR-R-Rand Prix* pack-in, of all things, for which I had to contact the Kellogg's cereal archive department for some box art, as none originally existed. Yes, I know I have a problem."

Now you'd think there wouldn't be too many F1 games to collect, but the spreadsheet Jon sent us suggests otherwise. It includes 547 games and Jon intends to get them all. "Of these I own 355. If you consider different regions as separate formats, this is across 98 total formats."

That's some dedication but Jon's drive, focus and sheer passion suggests it's an achievable goal. "There is now one simple rule to the collection – if it contains an F1 car, or an F1-style car, it's valid," he says. "I also include compilation titles where one of the games is an F1 game. *Namco Museum*, with *Pole Position*, is available on about 20 formats so that's a killer right there, but I'm in too deep to be saved at this point…"

With Jon preferring sim-based games over the arcade-style racers that are in his collection we were wondering if there was a specific era he liked to collect for. "The PS1 era games were fantastic until EA claimed the licence and dialled back the realism for a broader audience," Jon says. "Thankfully, with Codemasters at the helm for the past two generations of consoles, F1 games have all been fantastic replications of the sport."

Jon's unusual focus also means that his collection shouldn't be too pricey to complete, although there are always outliers. "Some games are dirt cheap, like with old football games," Jon admits. "PlayStation 1 and 2 titles cost pennies, but Nintendo titles are generally rarer and cost more, in the region of £15-30."

Jon's focus on collecting different regions has also thrown an unexpected spanner in the works. "The hardest games to find are the older USA games, as F1 has never been as popular there in the past, so less copies exist," he concludes. "Plus, import costs are crazy at the moment, coupled with the general inflation across the board for retro titles makes it quite tricky. Trying to find a cardboard-boxed American NES Formula 1 game is not easy!" *

Got an impressive collection of your own? Contact us at:

RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com

SD F1 GRAND PRIX

"The rarest boxed Super Famicom F1 game, *Super-Deformed Formula 1* is a Mode 7 kart racer (yup, like that other one) but with weird animals driving F1 go-karts. It's bonkers!"

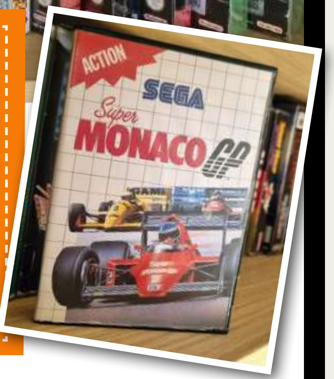
PAID: £150

JEWEL IN THE CROWN

SUPER MONACO GP

■ "It's common as muck, and dirt cheap nowadays. But, it was my first game, the one that caused this madness."

PAID: £40 (1991)



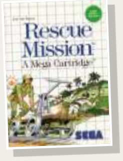
BARGAIN HUNT

Your guide to the rising world of retro prices

THE COVER STAR

WIPEOUT PULSE/WIPEOUT PURE

WipEout Pulse, which graces our newsstand cover is available on PSP from **£3,** with prices hitting **£15** for a sealed copy. The PS2 version can hit **£70.** *WipEout Pure* (our subs cover) is a lot cheaper and rarely sells beyond the **£5** mark on PSP.



RESCUE MISSION

This tough PAL Master System game can be found complete for under **£9.** It's even cheaper if you're happy with just a cart.

PROFESSIONAL SKI SIMULATOR

The 8-bit versions of Codemasters' game rarely exceed **£3.** There is a variant of the Amiga version commanding a price of **£72,** but we've seen no recorded sales for months, so make of that what you will.

TEMPEST 2000

Darran purchased this in May 2021 for **£26.** The PAL copy (which is thankfully unoptimised) now ranges between **£40** and **£71** depending on condition. The US version regularly hits **£130** before shipping.

RED FACTION

The PC version of this destructive first-person shooter regularly sells between **£1** and **£5.** The PlayStation version is also cheap, typically selling for no more than **£3.** *Red Faction* also made it to the N-Gage, and its rarity means you'll pay up to **£17** for it.

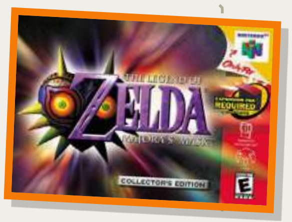
PAC-MAN CHAMPIONSHIP EDITION

Namco's excellent update is readily available on digital Xbox stores for **£6.75.** If you really need a physical release you can get *Namco Museum Virtual Arcade* from **£5** to **£23.** Just be mindful that *Pac-Man CE* is not actually included on the disc itself (it's bafflingly a download only).

THE LEGEND OF ZELDA: THE WIND WAKER

While many *Zelda* games can now fetch hundreds of pounds, your favourite GameCube game remains relatively cheap with copies selling between **£20** and **£60** (that higher price gets you the version with *Ocarina Of Time* and *Ura Zelda*). The Wii U version hits **£30** for a normal copy and **£140** for the limited edition.

THE LEGEND OF ZELDA: MAJORA'S MASK



This is a classic example of demand driving prices. In the US complete versions of *Majora's Mask* rarely pass **$200 (£153)** as it's fairly plentiful. When US copies turn up in the UK it whips collectors like Darran into a frenzy. The last copy saw eight buyers push the final price to **£410!**

Prices correct at time of print

MY RETRO LIFE

PERSONAL STORIES ABOUT OUR **SHARED PASSION**

FIGHTING FAILURES

How ageing machines have added new challenges to Nick's hobby

I had a rotten run of luck with consoles breaking last year. It all started when my Dreamcast gave out during a stream – those of you familiar with the console will know it can develop a tendency to randomly reset, and that's what happened to mine. That's an easy fix, but the hits kept coming in the summer. My Xbox gave up the ghost five minutes into a *Jet Set Radio Future* stream, and my PS3 only just struggled through a *Tokyo Jungle* stream, both of them suffering from failing disc drives. At the end of the year, I went to compare the Game Gear to the Analogue Pocket while reviewing the latter, and found that the old handheld had failed too. While it's a high-maintenance machine, I'd had it recapped as recently as 2015 so I was mightily annoyed.

This is an unfortunate but very real facet of the retro-gaming hobby. If you're playing on real hardware, dealing with machines that have been around for at least a couple of decades, you've got to expect hardware failures. I learned that at a young age when the power supply for my Atari 2600 stopped working. Thankfully, my uncle was able to repair that. Then in 2005 I managed to wear out my Dreamcast's GD-ROM drive, and from there I've experienced a variety of faults, both on cherished childhood consoles and untested items I've picked up.

So what is a retro gamer to do when beloved hardware bites the dust? The answer has always seemed obvious to me – you fix it. Plenty of my relatives have been involved in that kind of work, and it all rubbed off on me, but the biggest influence would be the family car-repair business my grandad ran. He and my dad both worked there until my grandad retired in 2015, and over the years I spent a lot of time in the workshops with them. I was never going to follow in their footsteps though, mostly because I was the family's version of an IT help desk by that point, and I developed a knack for working with hardware as well as software.

The result of all this is that repairing and occasionally modifying hardware has become inextricably linked to my retro-gaming hobby. Back when **Retro Gamer** was made in an office, it wasn't uncommon to see me tinkering with a project at my desk during my lunch breaks, mostly because I didn't have an adequate workspace at home. Thankfully I'm much better equipped after moving to a larger home.

It can certainly be daunting to start messing around with broken hardware, and while advanced projects will naturally require appropriate tools such as soldering equipment and a multimeter, some fixes can be surprisingly simple. My 32X arrived broken, but a quick bit of research revealed that the ribbon cables connecting the system's two internal PCBs can sometimes be displaced. I opened it up, reseated them and it worked with no problems after that. Likewise, a decade ago I solved the PS2 woes of a number of friends simply by cleaning the laser lens – and you don't even have to remove any screws to do that on a slim PS2.

Even when I do have to bust out the soldering iron, you'd be surprised how often the solutions are very simple. When my Neo Geo MVS board arrived with a persistent graphical fault, the fix was to apply a little extra solder to one leg on a single chip. Ironically, my older machines often fare better because most of them use cartridges. None of my many Master Systems have ever failed me, but disc-based consoles frequently suffer for their inclusion of moving parts, and the design flaws of the Xbox 360 and PS3 are well known – I have owned no less than four defective PS3 consoles at this point. Then again, I'm like my other grandad, who used to pick up slightly busted cars just to have a project and something to complain about.

The thing is, while this is a part of the hobby I enjoy, I know that's not going to be the same for everybody. Plenty of retro gamers won't want to deal with hardware repairs, whether that's due to a lack of knowledge, confidence, time or something else. Even those of us who are willing to delve into this kind of work are eventually going to run up against the effects of time, whether that's in compounding failures or a simple lack of parts, and find some systems will be beyond repair. That's why I'm passionate about covering alternatives in the magazine, even though I personally prefer to play on original hardware in most circumstances. Do I understand why some people might not like emulated releases of classic games, FPGA-based clone systems or optical disc emulators? Absolutely. Do I think that they're going to become ever more crucial to the hobby as the years go by? I do.

Still, I don't foresee a point at which I will be abandoning my tools. I enjoy the challenge of restoring these machines too much, and hate the idea of them ending up as landfill. There are plenty of companies making new parts for classic systems these days too, which certainly helps. As long as I have anything to say about it, there's plenty of life left in my old systems. *

SHOPPING FOR SPARES

THE ONLINE STORES I HEAD TO WHEN LOOKING FOR REPAIR SUPPLIES

VIDEO GAME PERFECTION

videogameperfection.com

This EU-based site offers offers modding and repair services for a variety of systems, and sells parts for those who wish to take the DIY route.

CONSOLES

console5.com

An American store that doesn't offer modding or repair services, but has a huge number of parts including pre-picked capacitor kits for various systems.

RETROSIX

retrosix.co.uk

Although it clearly specialises in supporting handheld hardware, this UK store offers parts and services for a wide range of retro consoles.

SINTECH

sintech-shop.co.uk

If you're looking for classic computer repair parts rather than console components, this shop could well have the items you need.

ZEDLABZ

zedlabz.com

Although it seems to be more geared towards modern systems, Zedlabz stocks plenty of parts and accessories for retro consoles too.

OLDMANUNRE
CYBERNETICWALRUS
MRMIDLIFE
YDG2002
FOLLOW
HKT3030

HERE'S THE MOMENT MY XBOX GAVE OUT ON STREAM – YOU CAN SEE HOW HAPPY I LOOK ABOUT IT.

WHEN I DO VISIBLE MODS, LIKE THIS MEGA DRIVE REGION SWITCH, I LIKE THEM TO BE AS UNOBTRUSIVE AS POSSIBLE.

THIS CHARITY SHOP PURCHASE WAS IN A TERRIBLE STATE – THE GUNKED UP DRIVE TRAY WAS A SIGHT TO BEHOLD.

HOW DO YOU DEAL WITH HARDWARE FAILURES?

Readers share their approach to device death

jeffsretrogaming
I knew this was an inevitability so taught myself how to do console/system repair including soldering and now can fix pretty much anything. I also spend time every year opening each system to clean out dust, check capacitors, etc. A little preventative maintenance goes a long way.

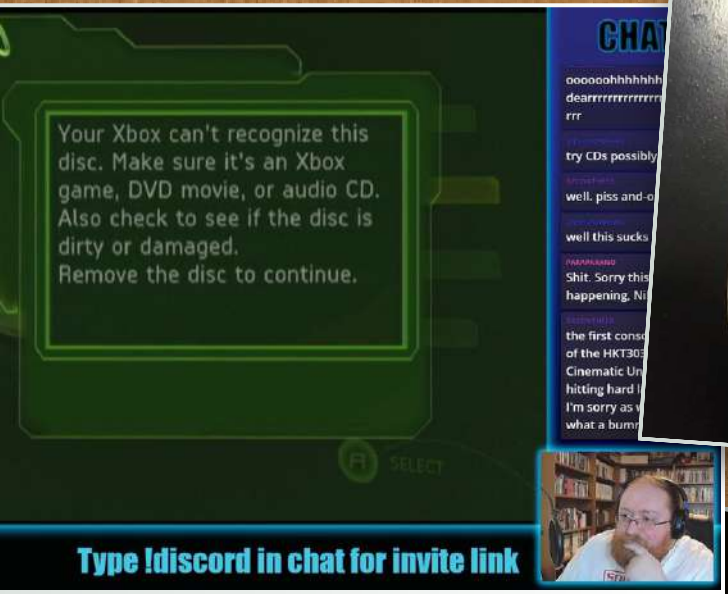
Simon Plumbe
Something I use regularly I get repaired, but if it's a system that just gathers dust then I just give it to someone who can make use of it for parts or wants to fix it up. I never throw retro hardware away though.

Tim Surman
It's the main reason I mainly use emulation. Although I've got a number of GameCubes and GC parts in just as backup.

Joel Reimer
If it's something simple, like a controller, there's a good chance I can fix it. However, if it's a console, I'll likely send it in for repairs. I don't want to make it worse, after all.

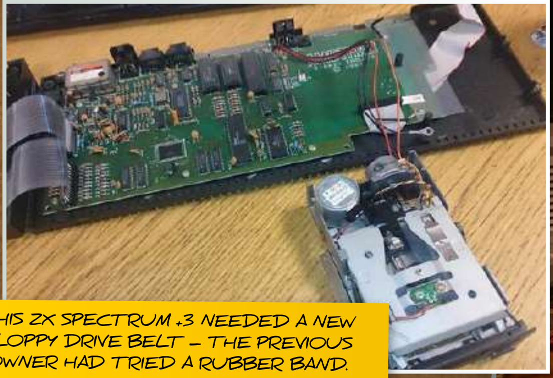
Mateus Fedozzi
I've learned to avoid buying any optical media machines. The cartridge-based ones give way less headaches.

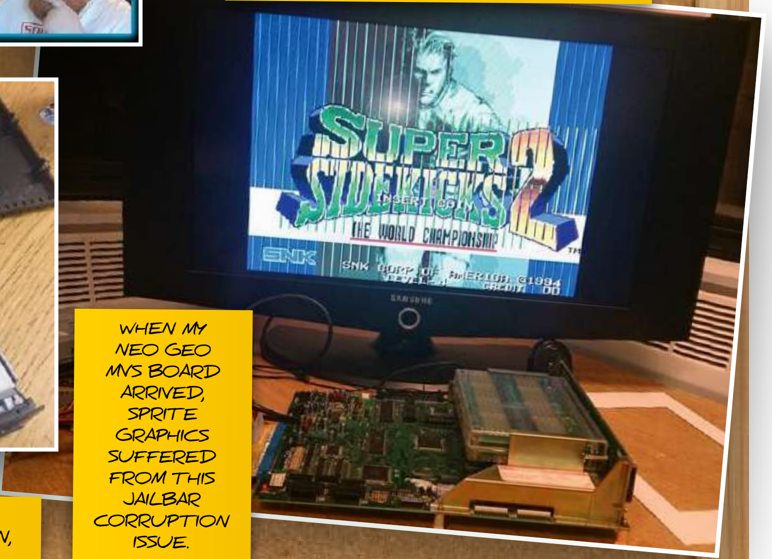
Darren Nicholls
I put them under my wish tree in the hope elves fix them… there's been no luck so far, but never say never!


Your Xbox can't recognize this disc. Make sure it's an Xbox game, DVD movie, or audio CD. Also check to see if the disc is dirty or damaged.
Remove the disc to continue.

Type !discord in chat for invite link

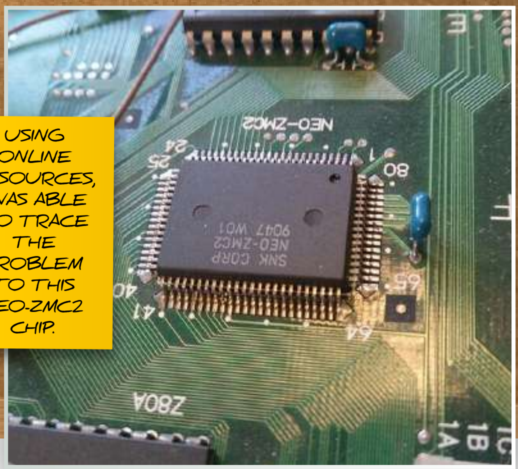
MY XBOX 360 CONTROLLER TOOK A HAMMERING IN VARIOUS STUDENT HOUSES, SO I REPLACED THE THUMBSTICKS IN 2018.


THIS ZX SPECTRUM +3 NEEDED A NEW FLOPPY DRIVE BELT – THE PREVIOUS OWNER HAD TRIED A RUBBER BAND.



WHEN MY NEO GEO MVS BOARD ARRIVED, SPRITE GRAPHICS SUFFERED FROM THIS JAILBAR CORRUPTION ISSUE.

I TOOK THE SYSTEM TO PIECES FOR A DEEP CLEAN, AND NOW YOU'D NEVER GUESS IT HAD BEEN SO ABUSED.



USING ONLINE RESOURCES, I WAS ABLE TO TRACE THE PROBLEM TO THIS NEO-ZMC2 CHIP.

I REPLACED THE LARGE GEAR IN THIS PSONE CD-ROM DRIVE, AS THE ORIGINAL HAD BROKEN TEETH.

MAILBAG

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For all players
Legends

STAR LETTER

IT'S ALL TOO MUCH

Dear **Retro Gamer**,
I loved the recent article about being more intentional about purchases and possibly selling those games that will not be played. I myself am a collector, but I also struggle with over buying, especially games I will literally never play.

I genuinely feel it would be really nice to hear more from the team regarding this. I know for myself it was helpful to hear about Darran's thoughts on the subject, and it helped me to understand that I am not alone, and quite possibly that I need to grow in this area as a person.

Thank you for the magazine. I am a new subscriber, but I enjoy it.
Many thanks,
Nicholas Jankovic

We're glad Darran's article spoke to you, Nicholas. If you're new to the mag you may have missed Darran and Nick discussing their collections in issue 218. We're both of the opinion that collecting is a healthy part of the hobby, providing you don't let it overwhelm you. Take it steady and you'll be fine. Have a book while you ponder the best steps to take with your collection.

» Collecting games can be fun, but you should never let it dominate your life.

1PLAYER 15800
HI-SCORE 200000
RRRR
2PLAYER 26000

» [PC] Darran always uses emulation when he streams and has never had complaints about it.

TWITCH PREFERENCES

Hi **Retro Gamer**,
Love the mag as always, especially the calendars – I put them up at work and get great comments from my fellow old nerds.

I've been streaming retro on Twitch lately and with yet another way to play retro games out with The A500 Mini I thought I'd ask the experts. Do you prefer watching people play on real hardware versus emulation? I don't have a capture card so I'm emulating, but would love to hear your opinions.
Keep up the great work,
Scott G

Thanks for writing in, Scott. Ultimately we both prefer real hardware whenever possible, but appreciate this isn't always viable for streaming. Nick streams far more regularly than Darran and his viewers feel it's not particularly important to their enjoyment. Do what makes you happy.

RETRO FIGHTERS

» Retro Fighters has made some great pads and its Brawler64 is another good purchase.

PANGS OF NOSTALGIA

Dear **Retro Gamer**,
I'm a long-time reader, first-time 'caller'!

Late last year my brother and I wrote our first retro-inspired game called *Pangaroids* and put it on Steam – for FREE so that everyone can enjoy it.

It's inspired by old-school arcade classics (including *Pang* and *Asteroids*), Commodore 64 and Amiga 500 games, and a simpler time when games didn't have to be hundreds of hours long. We've crafted a short game that we hope takes you back to that nostalgic time.

We're middle-aged brothers who have teamed up from opposite sides of the world to create our first videogame together – from an idea one of us first envisioned 20 years ago. I wrote the music for the game, inspired by 8-bit games from my youth and I would love it if you could check it out and let me know what you think.

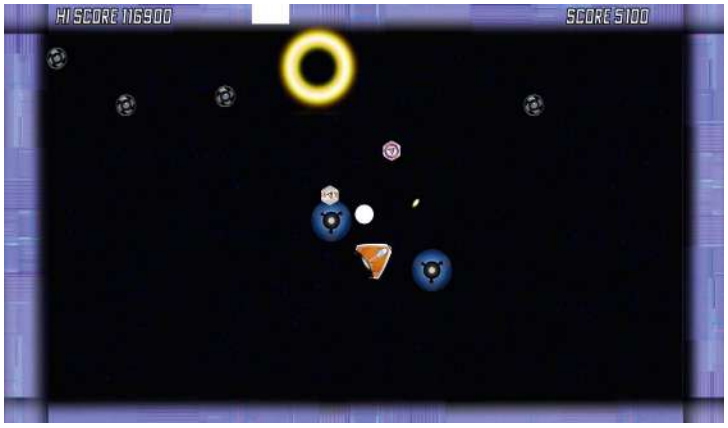
Anyways, love your mag and keep up the good work!
Michal Wozniak

Thanks for letting us know about your game, Michael. We've been having a lot of fun with it.

TAKING CONTROL

Hi **Retro Gamer**,
I've just got a hold of a Retro Fighters – StrikerDC controller and I'm blown away by the difference a controller like this makes. Not only did I find myself going back and playing some of the best 2D fighters from the Dreamcast library but some classic racing and action games. It has made me rethink how many older consoles could benefit from a controller redesign like this and how even consoles that aren't 'that bad' can be refreshed. I'm tempted to look into getting back my old N64 collection now there are more comfortable controller options.
Kind regards,
Sam K

We're glad you're enjoying the StrikerDC as it's a nifty controller that is much nicer to use than a traditional pad. Darran can also recommend Retro Fighters'



» [PC] *Pangaroids* is fast, fun and free. Head on over to Steam and check it out.

Don’t forget to follow us online for all the latest retro updates

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Brawler64 joypad. He uses it exclusively when playing on his modded N64.

TIME TO SPLIT?

Dear **Retro Gamer**,
This year sees the 50th anniversary of the Magnavox Odyssey, meaning that we have five decades of gaming to celebrate, hooray!

A lot has happened since **Retro Gamer** launched in 2004, including the definition of retro itself, which let’s face it, is both fluid and subjective. While I enjoy articles about these new-fangled Sony and Microsoft consoles, my interests and many others of my generation are fixed squarely on the 8-bit and 16-bit eras of the Eighties and Nineties.

In the same way *Mean Machines* split for Sega and Nintendo would there be scope to have two **Retro Gamer** magazines, one covering the ‘golden age’ (perhaps called something like *Vintage Gamer*) and one covering everything since?

I daresay that I’d end up buying them both anyway and I’m sure that there are many who feel the same way.
Cheers,
Davey Sloan

Thanks for writing in, Davey. While it’s certainly a very nice idea in theory we don’t feel it would really work in practice. Plus it’s hard work getting one mag out a month, let alone two!

» Retro gaming covers multiple generations so we like **Retro Gamer** to mirror that.

DISCUSSED THIS MONTH

Meeting up

The Retro Gamer team hasn’t seen each other since the great office clear out of April 2020. That changed this issue as Darran and Nick were finally able to meet up in Nick’s hometown of Harlow. Much was discussed with Nick introducing Darran to the joys of World Chase Tag, Vtubers, dudebros and gun beds.

ISSUE 232’S ECCO ARTICLE

The photos of Maurice Molyneaux and Mihály Sáránszki were accidentally transposed in last month’s feature – apologies to both for the error.

» Maurice Molyneaux.

» Mihály Sáránszki.

Your say

Every month, Retro Gamer asks a question on social media and prints the best replies. This month we wanted to know…
What’s your favourite WipEout game?

» [PlayStation] *WipEout 2097* is a firm favourite with readers. Makes sense, it’s excellent

Ben Wilson
It’s a boring answer, but it’s *2097*. It was the first game soundtrack I remember that really blew me away in terms of quality and quantity. The gameplay was second to none for racing games in 1996.

N64 Memories
WipEout 64. I know it’s not the best – *2097* probably is – but the hype for this was unreal. A *WipEout* game on a Nintendo console! I played it over and over and over. I still enjoy a playthrough today.

Ste92gamer
WipEout 3: Special Edition. It had the best music and prototype mode as the ship goes so fast.

Keldon
WipEout Pure is my top pick. I remember playing in a PSP launch tournament for the game and getting second place!

Flashed Back
WipEout on the PSX. Cool gameplay with awesome soundtrack by Cold Storage, just fantastic.

Martin Whitehouse
WipEout 2097. It was simple, effective and a HUGE upgrade over the original. Soundtrack was probably the most iconic also.

Mickael Loisy
Wip3out. I think it was the epitome of the original formula, especially in terms of design.

Rob
Kelly Slater’s Pro Surfer on the PS2. The wipeout you get in that game is seriously epic! [There’s always one – Ed]

Cheapether
Many will say *2097*, but my belief is that *HD Fury* is the absolute pinnacle of the entire genre. A culmination of years of refinement in development, it possesses stunning audiovisual presentation and deep, nuanced, masterfully balanced gameplay; a masterclass in execution.

Hank Hammer
Have to say the first one, it was difficult and unforgiving, but it blew me away at the time. I’d never seen a game like it.

Dugan
2097 for adding the ability to scrape against the track edge rather than just halt your craft. Oh and superb tracks and music too.

Mike
WipEout 2097 is the right answer, but *WipEout 3: Special Edition* needs a mention for those amazing remade tracks!

Ken Harrison
Pound shop *F-Zero* innit. [Looks like there are two this month – Ed]

Jay
Got to agree with this 100% *Wip3out* really refined the formula but *2097* had the most impact.

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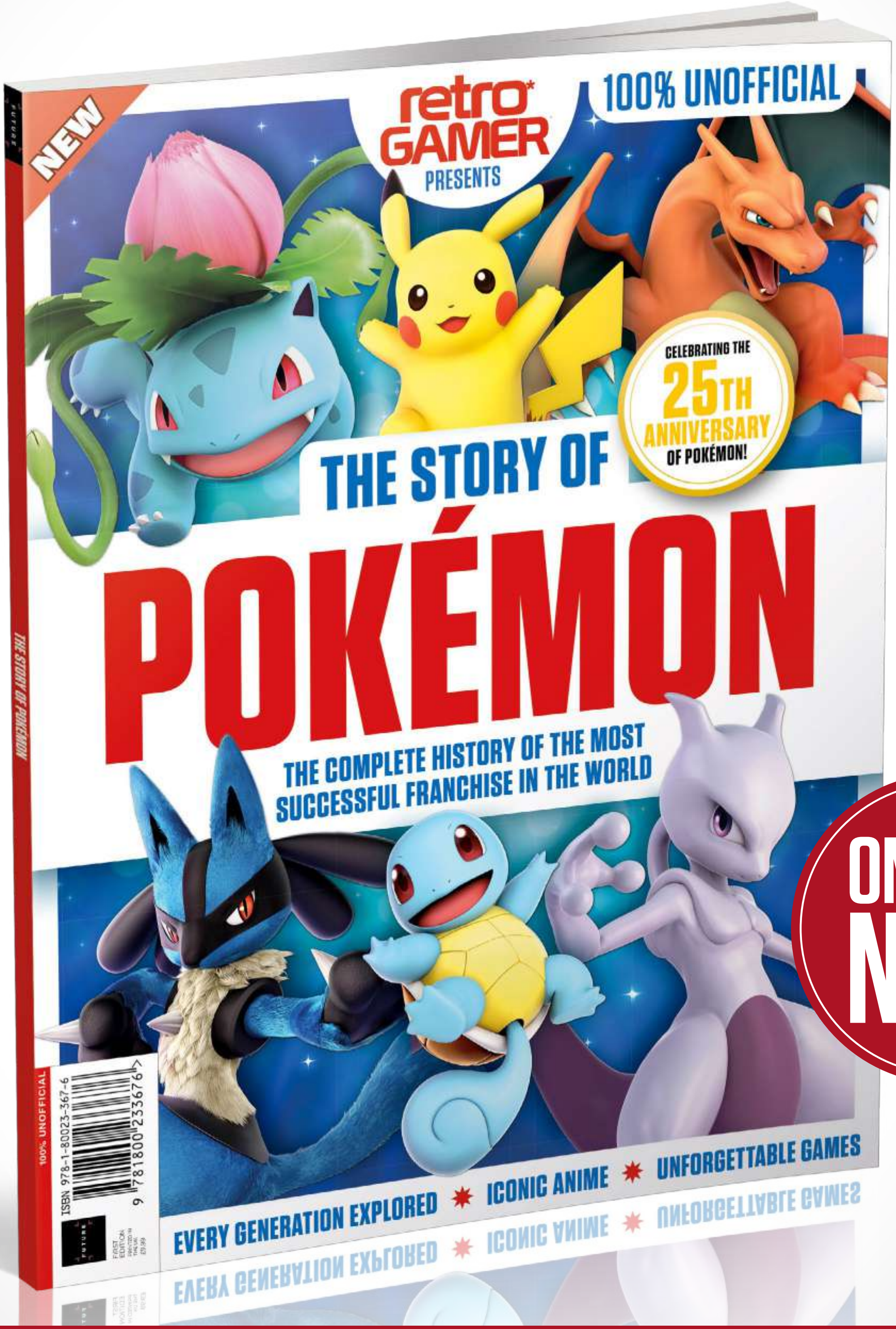
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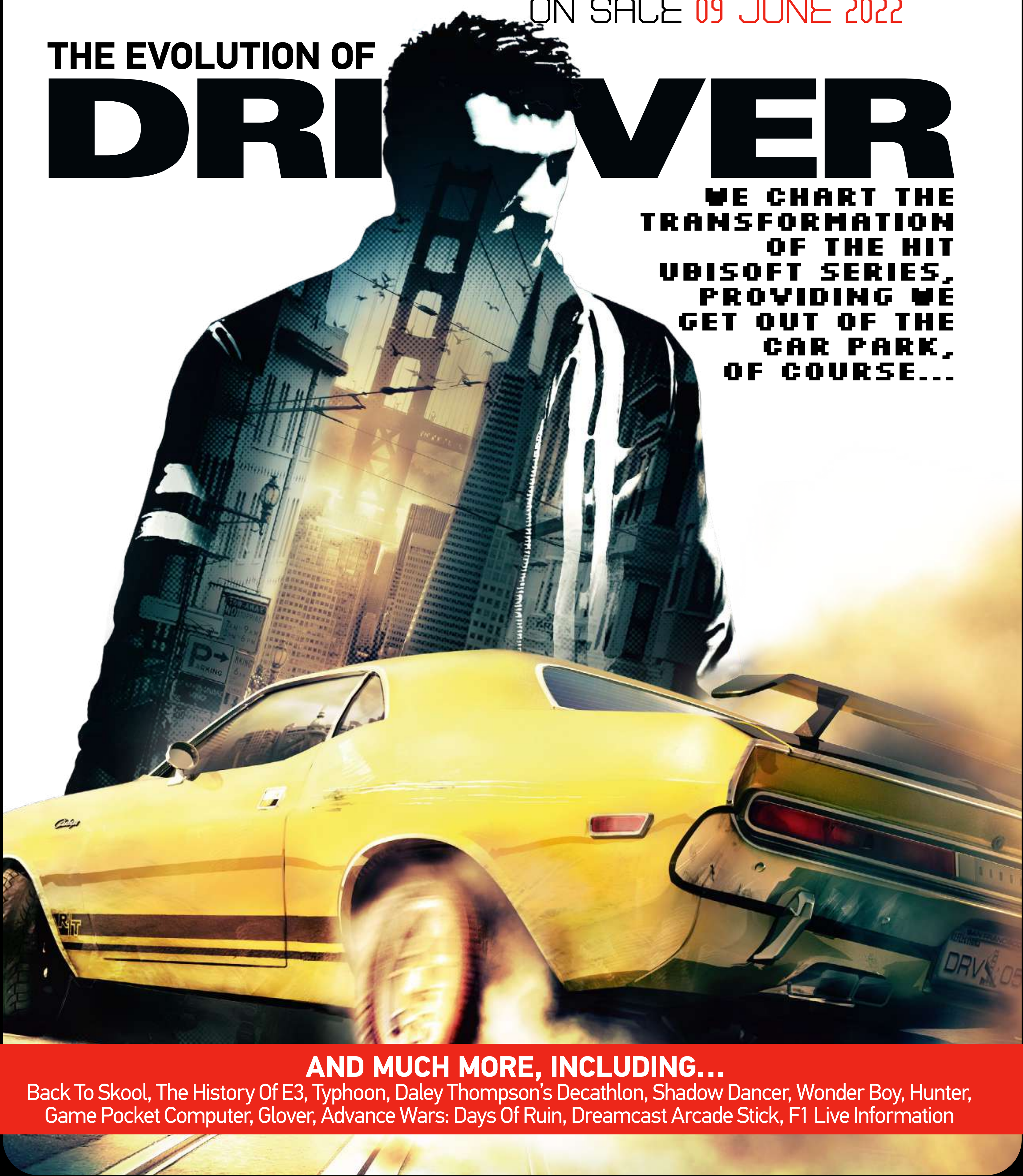

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AND MUCH MORE, INCLUDING...

Back To Skool, The History Of E3, Typhoon, Daley Thompson's Decathlon, Shadow Dancer, Wonder Boy, Hunter, Game Pocket Computer, Glover, Advance Wars: Days Of Ruin, Dreamcast Arcade Stick, F1 Live Information

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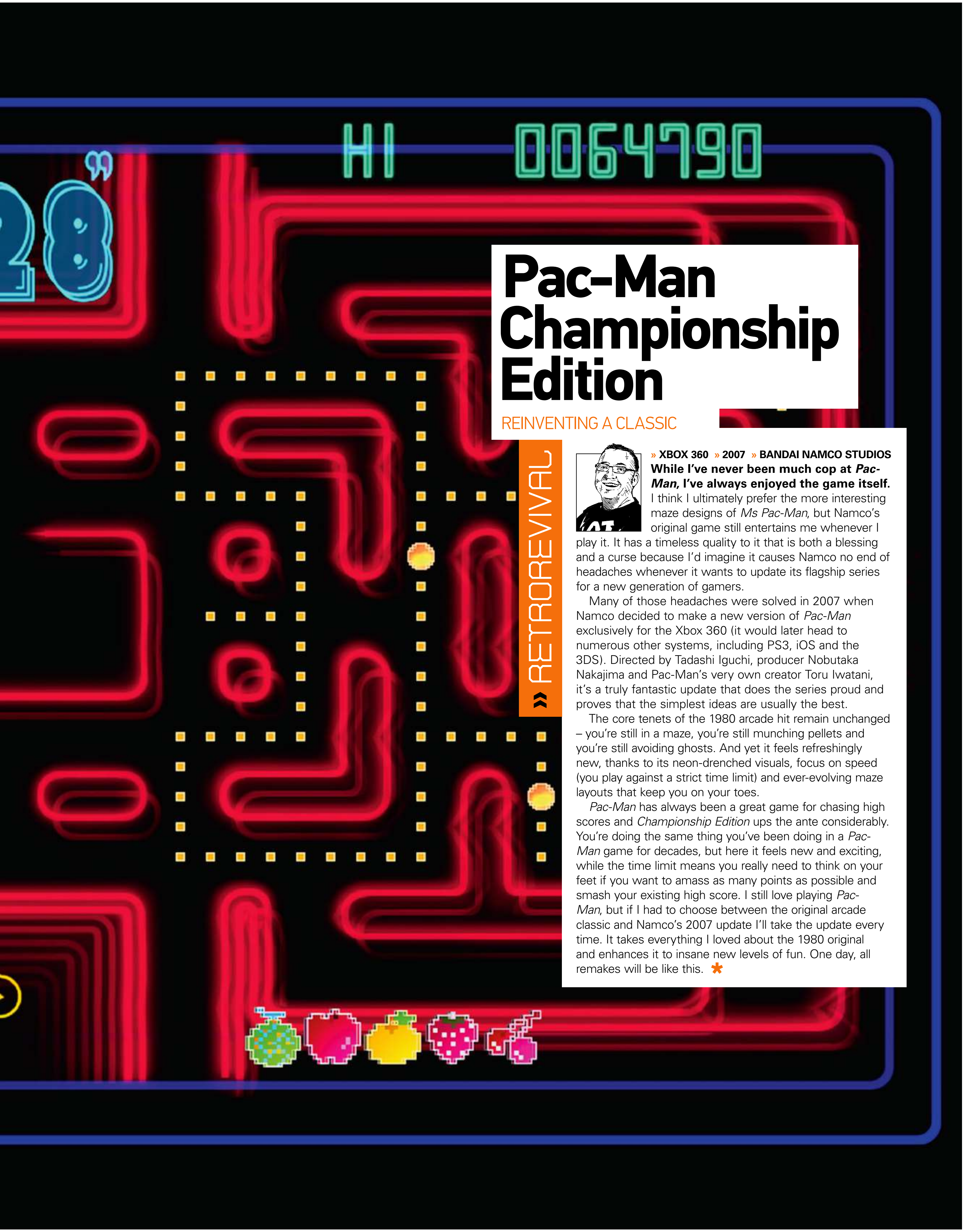


» RETROREVIVAL

Pac-Man Championship Edition

REINVENTING A CLASSIC

» XBOX 360 » 2007 » BANDAI NAMCO STUDIOS

While I've never been much cop at *Pac-Man*, I've always enjoyed the game itself. I think I ultimately prefer the more interesting maze designs of *Ms Pac-Man*, but Namco's original game still entertains me whenever I play it. It has a timeless quality to it that is both a blessing and a curse because I'd imagine it causes Namco no end of headaches whenever it wants to update its flagship series for a new generation of gamers.

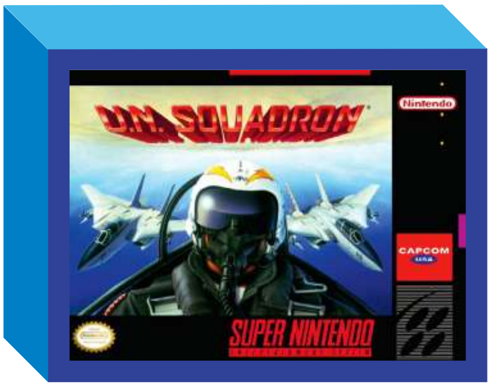
Many of those headaches were solved in 2007 when Namco decided to make a new version of *Pac-Man* exclusively for the Xbox 360 (it would later head to numerous other systems, including PS3, iOS and the 3DS). Directed by Tadashi Iguchi, producer Nobutaka Nakajima and Pac-Man's very own creator Toru Iwatani, it's a truly fantastic update that does the series proud and proves that the simplest ideas are usually the best.

The core tenets of the 1980 arcade hit remain unchanged – you're still in a maze, you're still munching pellets and you're still avoiding ghosts. And yet it feels refreshingly new, thanks to its neon-drenched visuals, focus on speed (you play against a strict time limit) and ever-evolving maze layouts that keep you on your toes.

Pac-Man has always been a great game for chasing high scores and *Championship Edition* ups the ante considerably. You're doing the same thing you've been doing in a *Pac-Man* game for decades, but here it feels new and exciting, while the time limit means you really need to think on your feet if you want to amass as many points as possible and smash your existing high score. I still love playing *Pac-Man*, but if I had to choose between the original arcade classic and Namco's 2007 update I'll take the update every time. It takes everything I loved about the 1980 original and enhances it to insane new levels of fun. One day, all remakes will be like this. ✱

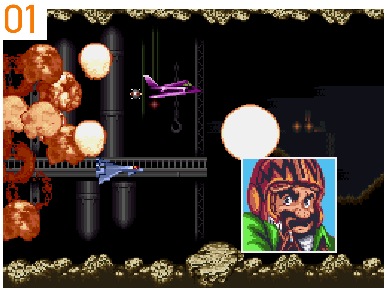
ENDGAME

UN SQUADRON



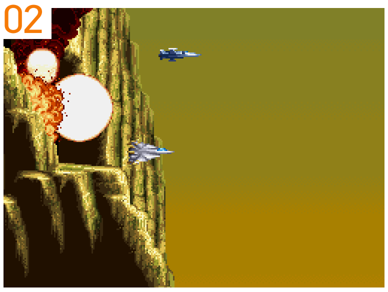
» Known in Japan as *Area 88*, Capcom's SNES shmup is a conversion of its arcade game, which itself was an adaptation of a popular manga. Capcom's game features three pilots who are tasked with ending the terrorist group Project 4, which is threatening to destroy the world. Right, that's the history lesson out of the way, let's find out what happens to Greg in the final showdown.

01



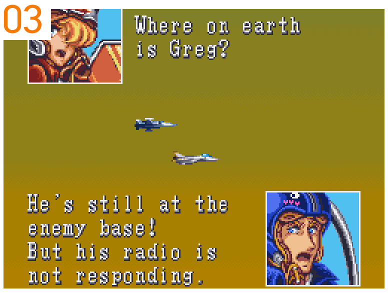
» Greg whoops with exhilaration as Project 4's huge flagship explodes. The celebration is short-lived however as he still needs to fight his way past enemy craft and now there's a huge fireball approaching him from behind.

02



» With Greg's fate hanging in the balance we see Mickey and Shin escaping from Project 4's base. The mission has been accomplished and the pair rest easy knowing that the world will be a better place now.

03

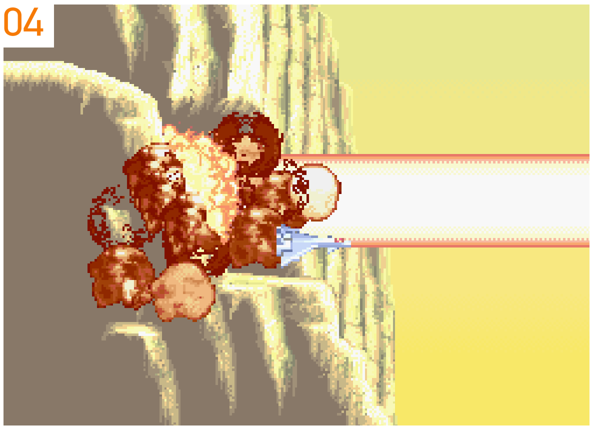


Where on earth
is Greg?

He's still at the
enemy base!
But his radio is
not responding.

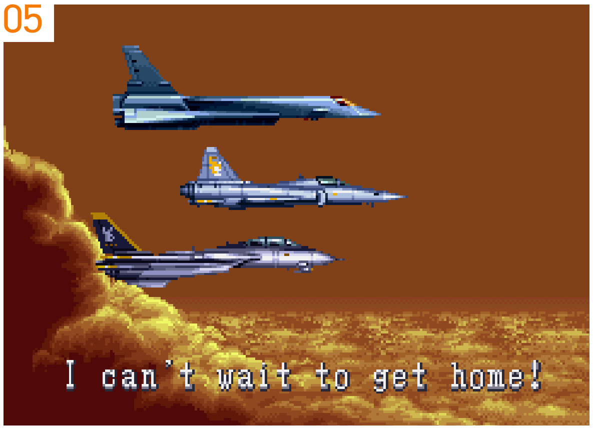
» Mickey and Shin's celebrations are cut short when they realise their friend hasn't joined them. Worse yet there's radio silence suggesting Greg has bought the farm. The pair wonder how they're going to explain Greg's absence to his wife.

04



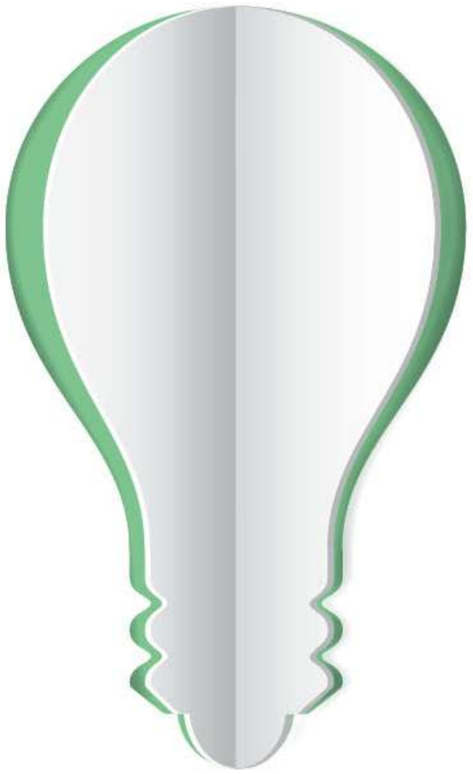
» Their thoughts are suddenly broken by a huge explosion behind them and they look back to witness a gout of flaming fury belching forth from the annihilated underground base. Poor Greg, he's surely dead. But wait, Greg lives! The plucky pilot shoots free of the gigantic fireball in the nick of time. Phew!

05



I can't wait to get home!

» It all got quite hairy at the end there but the friends are safe and Project 4 is no more so they begin their journey home. Greg admits that he thought he was going to die and tells his friends that he intends to put the war behind him so that he can spend more time with his family. How sweet.



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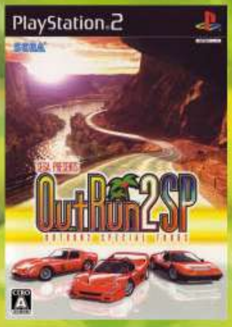
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